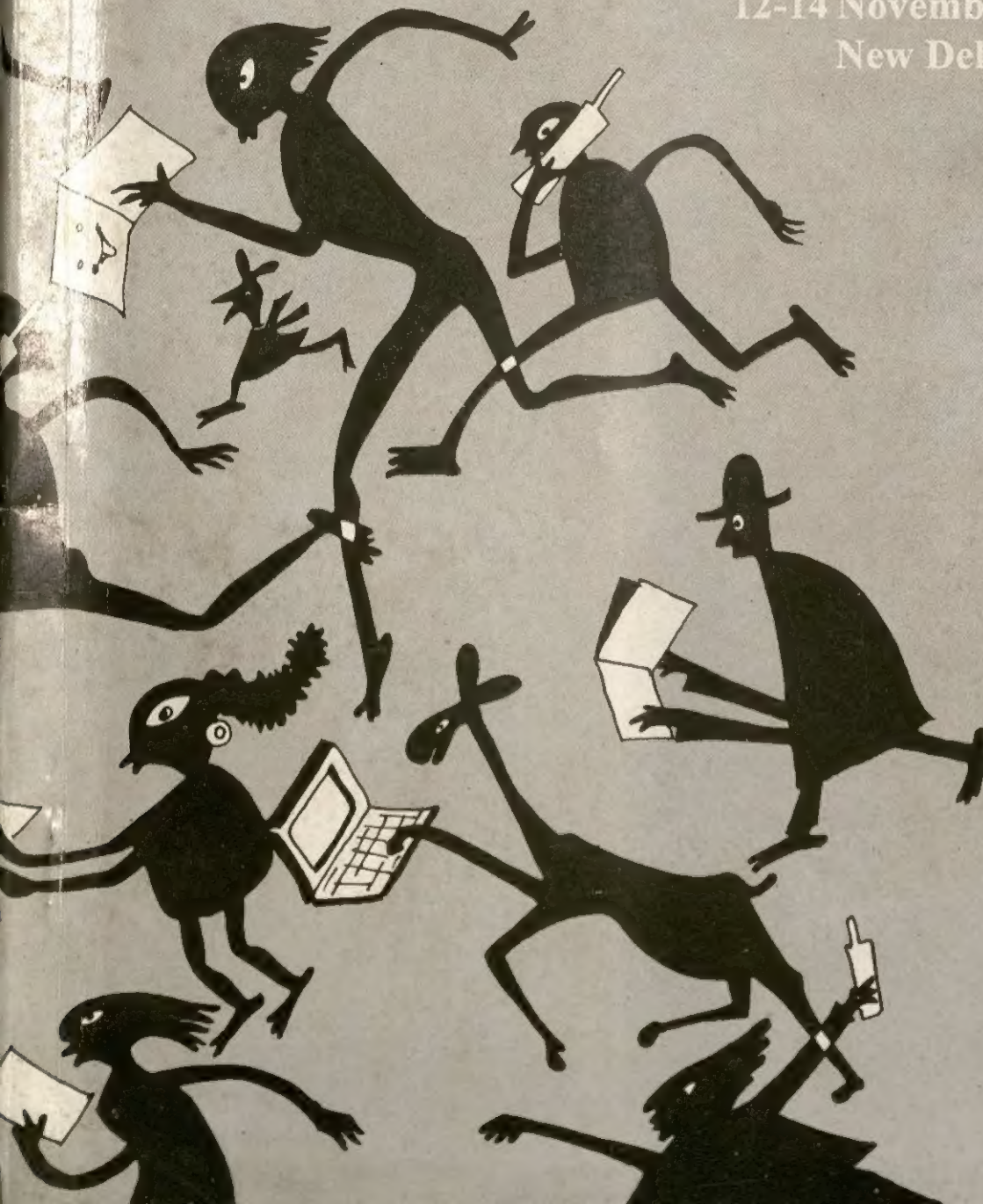




World Conference on Education India: The Next Millennium

12-14 November, 1997
New Delhi



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Education India
The Next Millennium

Conference Souvenir

Vigyan Bhavan and Hotel Le Meridien
New Delhi
November, 1997

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The Next Millennium

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New Delhi
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**World Conference on
Education India : The Next Millennium
12-17 November, 1997**

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November, 12, 1997
New Delhi

Media Fellow
Conference
Secretary

Master-Mentorship
Conference
Chairman

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Preface

We have great pleasure in placing this Souvenir in your hands. It primarily contains the abstracts of more than 150 papers to be presented in the Conference classified into 11 thematic areas -- Education for All, Education of the Prioritized Groups, Higher Education, General Education,, Technical Education, Management and Computer Education, Teacher Education, Impact of Education on People and Culture, Educational Systems Development, Cognitive Processes and Learning Systems, and Open and Distance Education

The abstracts vary widely in their style and quality. The diversity in styles and contents is the richness of this volume. We have avoided editing except trimming a few because of the length. The views expressed in the papers and abstracts are essentially that of the authors and not of the Conference organizers.

We thank Sri P.R.Dasgupta, Union Education Secretary for patrinizing the Conference. The Conference was originally conceptualized and initiated by three NGOs -- Institute of Education, Rural Studies and Development, All India Association for Educational Technology, and Educational Technology and Management Academy. The present level and magnitude of the Conference could be achieved because of collaboration of major institutions, like, National Council of Educational Research and Training, National Institute of Educational Planning and Administration and Indira Gandhi National Open University, as well as UNFPA and a few major public and private sector enterprises interested in education, like Intel, BEL, TALEEM Research Foundation, etc. Ministry of Human Resource Development, Government of India and Education Department of Government of Delhi have also, on principle, agreed to sponsor the Conference. We thank all these agencies for their collaboration and cooperation. Our special thanks are due to NIEPA -- Director, Registrar and the Administrative Staff for the organizational support extended all through the preparatory period and during the Conference.

Although we would prefer, it is difficult to acknowledge the contributions made by each individual by name. We thank all members of the Academic and the Organizing Committee for their immense contribution. Dr. Kailash Khanna deserves a special mention for her help in various areas of the Conference. Ms. Anita Priyadarshini and Dr. CRK Murthy dealt with the knottiest problem of any conference of this magnitude, namely, reviewing, editing and processing more than 150 papers on a wide ranging subject. Our sincere thanks to both of them. Mr. Sanjay Das, Mr. Soumen Panja and Sudhir Dagar worked day and night to give shape to the manuscript. Sri A. Manohar's ungrudging support to all of us made our job easy. We are grateful to all of them.

We thank Ms. Usha Ram for coordinating the preparation and production of this souvenir. Mr. S.S.Batra of Dee Kay Printers printed and produced this volume at a record time. We thank Mr. Batra.

November, 12, 1997
New Delhi

Madhu Parhar
Conference
Secretary

Marmar Mukhopadhyay
Conference
Chairman

We have great pleasure in placing this document in your hands. It primarily contains the contents of more than 150 papers to be presented at the Conference, classified into 11 thematic areas - Education for All, Education for the Environment, Science, Technology, Education, General Education, Technical Education, Management and Computer Education, Teacher Education, Impact of Education on People and Culture, Educational Systems, Development, Cognitive Processes and Learning Systems, and Open and Distance Education.

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We thank Mr. J. K. Das for contributing the preparation and production of this volume. We also thank Mr. J. K. Das for his help in the preparation and production of a number of the papers. We thank Mr. Das.

November 15, 1987
New Delhi
Secretary
Education
Ministry
Government of India



सत्यमेव जयते

मंत्री

मानव संसाधन विकास

भारत

MINISTER

HUMAN RESOURCE DEVELOPMENT
INDIA


October 23, 1997

MESSAGE

Education is an important instrument for economic and social development. As we march to the 21st century, the demands of the society are increasing manifold and the quality of education involves vision and action by synthesising major trends and strategies for future oriented education. There is a need to identify and adopt numerous innovative practices in learning theory, institution's organisation structure, curriculum and alternative forms of authentic assessment.

I am happy to learn that World Conference on 'Education India : The Next Millennium' is being organised during 12th to 14th November, 1997 at New Delhi. Events of such kind provide an opportunity to discuss all vital aspects to forge a collective consciousness to make education delivery system more vibrant, meaningful and purposeful to meet the emerging challenges.

I extend my greetings to the organisers, participants and convey best wishes for the success of the Conference.


(S R BOMMAI)



श्री
विश्वनाथ शर्मा

श्री

माननीय

माननीय शिक्षा विभाग

नया

दिल्ली 22, 1957

संदेश

शिक्षण ही एक अत्यंत महत्वपूर्ण
लक्ष्य है और इसका विकास ही हम
को आर्थिक और सामाजिक विकास के लिए
तैयार करता है। शिक्षण ही है जो हमें
आधुनिक ज्ञान और विचारों से परिचित कराता है।
इसलिए हमें शिक्षण को हमारे जीवन का
अविभाज्य हिस्सा बनाना चाहिए। हमें
शिक्षण को हमारे जीवन का एक अविभाज्य
हिस्सा बनाना चाहिए। हमें शिक्षण को
हमारे जीवन का एक अविभाज्य हिस्सा बनाना
चाहिए। हमें शिक्षण को हमारे जीवन का
एक अविभाज्य हिस्सा बनाना चाहिए।

मैं आप सभी को आमंत्रित करता हूँ
कि आप इस महत्वपूर्ण अवसर का उपयोग
करें और अपने विचारों को व्यक्त करें।
हमारे उद्देश्य है कि हमें एक
एकतापूर्ण दृष्टिकोण हो सके। हमें
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हमें एकतापूर्ण दृष्टिकोण होना चाहिए।

(2 E BOMBAI)



MUHI RAM SAIKIA

राज्य मंत्री
मानव संसाधन विकास मंत्रालय
शिक्षा विभाग
भारत सरकार

नई दिल्ली - ११० ००१
MINISTER OF STATE
MINISTRY OF HUMAN RESOURCE DEVELOPMENT
DEPARTMENT OF EDUCATION
GOVERNMENT OF INDIA
NEW DELHI - 110 001

October 29, 1997

Dear Prof. Mukhopadhyay,

I am happy to know that you are organising a
'World Conference on Education India: The next
Mullennium from 12-14 November, 1997 in New Delhi'.

I wish you all success in creating a community
of learners, experts and thinkers of the contemporary
world to develop new educational paradigm to interact
in Education India.

With regards,

Yours sincerely,


(MUHI RAM SAIKIA)

Prof. Mukhopadhyay
Conference Chairman
World Conference on Education India
C/o AIAET F-5-E, DDA Munirka
New Delhi-110067

Organisation of Early Childhood Education and its Impact on Realization of Universalization of Primary Education

Devika Saikia

*S.S. Women's College of Education
Jorhat*

The last few year's development in the country have brought home to every one that early years are the most crucial proper growth and development of the children and early childhood education has significant importance for the well being of the children and universalization of primary education. The Education Commission (1964-66) has laid importance to early childhood education.

It is an accepted fact that the child is unique and has his/her own needs and rights. The declaration of the Rights of the Child by the United Nations proclaims that every child is entitled to all the rights and freedom set forth irrespective of race, colour, sex, language, religion, political and other opinions, national and social origin, birth or other status.

Mahatma Gandhi defined education by saying " By education I mean all round drawing out of the best of the child-body, mind and spirit". Most of the children of India have never been to schools. Many dropped out mainly because their parents could not afford their schooling. To make matters worse the cost of schooling has been increasing over the years. Population, too, is increasing much faster than the rate at which educational opportunities can be expanded. The millions in our country for whom an extra child means an extra working hand would not voluntarily restrict the size of their families unless and until they have had atleast a minimum amount of education and social mobility. A study of declining birth rates in Japan has shown that lower birth rates are statistically related to schooling and urban residence. Hence we can not afford to postpone the education of the masses. Ignoring the demands of universal education would be morally indefensible and probably economically too. Article 45 of our Constitution promised free and compulsory education to all children till 14 year. After five decades we were no where nearer the goal.

Problems in Indian Education and the Probable Remedies

Suresh Jain

*Kendriya Vidyalaya
Jabalpur*

The history of Indian education is a scenario of both light and darkness of outstanding achievements together with many failures. If one were to examine the tremendous growth in Indian education, the weaknesses like the unplanned proliferation, inadequate infrastructure, mismatch between education and employment, disrupted academic activities and academic calendars are equally prominent. The unit cost of education is much higher and the social return rate is much lower. The probable reforms may be given more priorities over opening of new schools, colleges and universities. Examination system should not be based on memory. Continuous grading and evaluation of students is a necessary step for improvement. High priority is given for distance education. Work experience and national or social service should become an

integral part of education at all stages. Emphasis should be placed on character formation, on the cultivation of moral and spiritual values and on the development of some of responsibility. The major weakness of educational planning in India has been that it has neglected the urgent problems of transforming our educational system to suit the life, needs and aspiration of the people so that it becomes an important instrument of national development.

Adult Education Programmes - Success or Failure

Mah Seema Masood
Aligarh Muslim University
Aligarh

Efforts have been made since long to eradicate illiteracy from our country under different names like National Adult Education Programme (NAEP), Area Development Approach (ADA), and now Total Literacy Campaign (TLC). The ultimate objective could not be attained due to different factors, so much so that a negative attitude has developed towards these programmes.

In view of miraculous success of Kerala Module, Total Literacy Campaign has been adopted as the strategy to combat illiteracy for the whole of the Nation. The experience is not so successful in Hindi speaking states - Uttar Pradesh, Madhya Pradesh, Bihar and Rajasthan, as in Kerala, West Bengal and some districts of Tamil Nadu.

Various causes of failure of total literacy have been identified in the Hindi-speaking belt, viz : dearth of trained functionaries; absence of spirit of voluntarism; inept handling of affairs at the hands of implementing agencies; lack of political will to tackle these problems with the missionary zeal; scarcity of genuine Non-governmental Organisations (NGOs); and the apathetic attitude of community itself (both the educators/planners and the beneficiaries).

TLC is in operation, nevertheless trends reveal that no wonders are going to happen this time too. The efforts undertaken by National Literacy Mission (NLM) are laudable, though at times not as emphatic as it should have been. The demon of illiteracy is to be attacked through different approaches, directions and techniques. The Kerala Module of TLC may not achieve laurels in every state, particularly in the Hindi - speaking belt. The Aligarh District has been adopted for TLC. Previously, other programmes had also been launched without significant success. Aligarh being situated in Uttar Pradesh also suffers from the same problems common to the Hindi-speaking belt.

Hence there is need to adopt different approaches for different places within a district like Aligarh. These are :

- Instead of entire district, small segments be identified and selected.
- Even among segments smaller groups be identified, to avoid stereotyped functioning, e.g. pradhans, women groups, housewives, etc.
- Targets should be realistic.
- Every effort must carry some element of innovation of its own to avoid the stereotyped implementation.

- There must be some accountability on the part of officials/members of implementing agencies.
- The provision of incentives, rewards/awards to good performers to be strengthened.
- Call for literacy alone cannot bring about the desired achievements, rather it should be directly linked with their necessities of life.

Thus at this juncture of time while there is a global call to 'Education for all by the year- 2000' it becomes imperative to take a fresh new look at the educational system in general and the non-formal education in particular, so that concerted efforts may be made to eradicate illiteracy from the scene.

Education For All

Than Singh
Kota Open University
Kota

Education is an important instrument for social and economic change and an investment for better future. It is a vehicle for accelerated planned development seeking removal of inequalities among societies, ethnic groups, regions, areas, men and women, and children is also an instrument of integrating them into a developing nation. Education can help to eradicate harmful and obsolete attitude. It can develop skills. It can communicate knowledge and as such it may contribute in development by increasing the efficiency of workers who are engaged in the task of nation building in various capacities and occupations.

The purpose of education is the liberation of man from the restraints and limitation of ignorance and dependency. Education has to increase physical and mental freedom to increase their control over themselves, their own lives, and the environment in which they live.

The ideas imparted by education should, therefore, be liberating ideas; the skills acquired by education should be liberating skills.

The increase in general population as well a expansion of the base of elementary and secondary levels of education have exerted considerable pressure on demand for various types and levels of courses. The growing realisation among Indian people about the socio-economic value of education and increasing manpower requirements for national development also contributed to increase in demand of education.

The objective of education is two fold development of students' personality and providing suitable manpower to the growing sectoral needs of our economy.

Universal Elementary Education In Mizoram : A Developmental Perspective

B. D. Chinara

North Eastern Hill University

Aizwal

The National Policy on Education (NPE) 1986, its Review Committee (1992), and Education For All (1993) gave unqualified priority to Universalization of Elementary Education (UEE) with a pronounced focus on disadvantaged groups : girls, Scheduled Castes (SCs), Scheduled Tribes (STs) , and physically handicapped. Besides, the NPE has extended UEE's narrow and unitary programme of educational facilities and enrolment targets to a comprehensive composite programme with the inclusion of universal access, participation, and achievement. Against this backdrop, the author attempts to analyse the development of and strategies for UEE of the most disadvantaged groups (SCs and ST girls), and to suggest the means not merely for achieving UEE in its entirety but also for setting target of computer literacy in Mizoram.

In the first section, the author depicts the development of UEE in post-independence decades with respect to universal access in terms of enrolment of all children, provision of primary school within one kilometre of walking distance and the ratio of primary school to upper primary school; universal participation in terms of dropout rates and school facilities through Operation Blackboard; and universal attainment of minimum levels of learning.

The second section discusses the strategies and programmes specially adopted and indigenously designed for UEE of SCs and STs girls. Accordingly, the author investigates the existing provision of equalizing educational opportunities for STs in respect of developing curriculum and devising instructional materials in tribal language, designing of curriculum in accordance with their cultural identity, training of tribal youth to take up teaching assignment, residential school and incentive schemes. Secondly, he examines the effectiveness of girls' education by keeping in view the demand side of interventions-women's awareness programmes, incentive schemes, and linkage of school with Early Childhood Care and Education centres and crèches' and supply side interventions-gender sensitization of the educational system, recruitment of more female teachers, and effect of non-formal education programmes.

In the concluding section, the author suggests the ways and means for strengthening the underdeveloped aspects for achieving UEE in its entirety. Instead of repeating the history of illiteracy, he argues, how to set the target here and now, and strengthen the very grassroot level of education for achieving the second-order literacy, i.e. computer literacy in Mizoram which is second to none except Kerala in literacy.

Curriculum Transaction in a Rural Primary School - A Case study

H. K. Senapaty

N.D.W. College of Teacher Education

Bhubaneshwar

Transaction of curriculum in the formal education sector is a major as well as structured process. The activities in a teacher training institute are directly or indirectly related to empower

prospective teachers with the knowledge and skills of curriculum transaction. But the products of TTIs, don't carry many such skills with them so as to practise them. The present study is an attempt to make an in-depth study of curriculum transaction with reference to media, modalities, issues relating to teachers, pupils, administrators, finance, school climate and so on, in respect of a rural primary school.

The school is located in the heart of the village alongwith ME school in one campus. The school has a big playground but no boundary wall. Students of classes I and II sit together whereas classes III, IV and V sit separately. There are four teachers in all including the headmaster. All are trained.

The data collected through qualitative interview, participant observation, discussion and probing reveal that the principal medium of curriculum transaction is chalk and talk. None of the teachers prepare lesson plans before entering classes although they know very well the purpose of it. No teaching learning material has been supplied under Operation Blackboard Scheme. Colour T.V. supplied to the school has been installed in the headmaster's residence. The answer is - school is not electrified nor it is safe to keep it in the school. Usually after 3 P.M. everyday children play some indigenous games like 'Kit-kit' and 'Bagudi' in the big playground as they like. Teachers are hardly found in the ground; teachers pass time gossiping till the final bell of the school. The major factor of not practising the pedagogic skills acquired during the teacher training course for curriculum transaction, as perceived by the majority of the teachers, are : lack of teaching equipments in the school as well as financial provision for the purpose. Lack of interest among the teachers to make use of pedagogic skills was observed. The non-cognitive areas of learning are totally neglected. Although competency based text books have been introduced in Class - I, the instruction is not competency based rather content based. Mid-day meal programmes affect the teaching learning process. Learning is sacrificed to memorisation.

Management of Primary Education in Tribal and Rural Areas : A Cross-Case Analysis

*Nityananda Pradhan
D.A.V. College
Koraput*

This is a case study on how primary education is managed in respect of two villages - one situated in tribal area and the other in rural area of Koraput District (Orissa).

Consequent upon the 73rd Constitutional amendment and the Panchayat Raj Act (1992), "education, including primary and secondary; technical training and vocational education; adult and non-formal education" have been transferred to the area of operation of the Panchayati Raj bodies. This is only in pen and paper. The reality is something else as revealed by analysing indepth the management style of the aforesaid two schools.

The Primary school situated at one corner of the tribal village is uncared for--no boundary wall, two classrooms with cracked roof, one teacher for seven classes (I-VII), no chair and table for the teacher, one wooden black-board, two newly constructed class rooms not handed over to the teacher and so on. Student strength as per attendance register is 45 but average daily attendance

is 13. An amazing and sorry state of affairs indeed. The school committee Chairman says, "The teacher is very good, provides KHADI (Mid-day meal) regularly, does not misappropriate rice and dal. "Ganesh Puja" was celebrated for the first time in the school under his guidance".

The rural primary school which is an upgraded M.E. school (Class -I-VII) has students strength of 125, separate class rooms available for each of the seven classes, properly fenced; five teachers in all, out of which three belong to the village, average daily attendance is 82. The Sarapanch of the Panchayat who belong to the village, when asked about the management of the school says, "the present headmaster is not punctual. He resides seven kilometers away from the village. The coconut trees found in the school campus is the contribution of one previous headmaster who was transferred from this school on complaints of some politicians of this village. The three teachers who belong to this village are the root cause of all the problems in the school".

The study revealed that transfer of powers to Panchayats in the management of primary education has not yet delivered any goods in respect of management of the tribal school. It is as it was. No tangible changes have occurred in the style of management in respect of rural case school. It is as it was. No tangible change have occurred in the style of management in respect of rural case school. The only change which the investigator observed is the change in the general awareness of the Panchayat members about their new roles. Lack of devolution of powers is the reality. How primary schools are managed in rural and tribal areas in the changing political scenario is a matter to ponder over by the educationists, researchers, planners and the decision-makers.

Education For All

Y. K. Singh

*Kendriya Vidyalaya, Air Force Station
Srinagar*

India completed 50 years of independence on 15th August 1997 and pledges made by Pt. Jawahar Lal Nehru in the midnight of 14th August 1947 still remain unfulfilled. The national political leadership after independence had realised that education provides the foundation for real national progress. Consequently, they incorporated in the republican Constitution (1950) the directive providing compulsory education for all children up to the age of 14 years within a period of 10 years from the commencement of this Constitution. But this pledge reflected in the Constitution of India has not been fulfilled even after the 50 years of Indian independence. The rate of illiteracy is ever increasing alongwith manifold increase in the population of India, and millions of children are deprived of getting the primary education creating a new social menace of child labourers. Consequently, India is counted among the 40 most backward countries in the world with its literacy rate of only 52 percent.

In the year 1997, when India is celebrating 50th year of Independence as Golden Jubilee celebration it is a ripe time to realise that India cannot dream of its progress, human development, prosperity and successful democratic country unless free and compulsory primary education for all turns out to be a vivid reality attaining the goal of 100% literacy. There is now a growing realisation among people all over the world that development of a nation is closely

linked with the development of its human resources. Education has a central role in the creation of human resources for development.

It is also pertinent here to hint upon some most important factors which are hurdles in realising the goal of total primary education for all. The factors responsible are uneven spread of education, low enrolment of the backward sections of the society, drop out of the children, low enrolment of girls, apathy and poverty of the parents, defective curriculum, uninspiring methods of teaching, lack of suitable reading and writing materials for children, lack of trained and qualified teachers, lack of suitable admission policy, conservative attitude towards co-education, inadequate and unattractive school buildings, poor nutrition of children, lack of sufficient number of primary schools, meagre financial outlays, non-stop increase of population and lack of sufficient commitment to put into real practice whatever is running on official papers.

As regards building new educational paradigm for the next millennium and compete with the developed and developing countries of world in the wake of democratisation and economic liberalisation, the need of the hour is to bring about a complete change in the prevailing system of education in India which is more theoretical less practical, more cumbersome less job-oriented and fails to cultivate the interest of the children. The study of age old Shakespeare, Milton, Keats and Dante will not serve the purpose in the present age of neck to neck competition in every walk of life on the world scenario but the purpose would be served by introducing job-oriented courses, by making moral education a part and parcel of school curriculum, by inducting personality development programmes and cultivating the desire to learn so that children may learn to function effectively as productive and caring citizens of a democratic society in a dynamic and fast-changing world environment and play a vital role in strengthening respect for human rights, eradicating poverty, protecting the environment, strengthening the roots of Indian democracy and improving the prospects for international peace and understanding.

Vocational Education

E.S.Naidu

*Defence Laboratories School
Hyderabad*

In this paper, author reviewed the recommendations of all the Committees and Commissions on Vocational Education. The paper also deals with government policies and public response to vocational education; it reviews a study report on attitude and aptitude of students towards vocational education. The paper deals specifically about vocational education in Andhra Pradesh - courses available, teaching personnel in vocational education, demand for enrolment, effectiveness and demand of the vocational education products in the employment market.

The author dealt with the issues of cost effectiveness and future of vocational education.

Education in India - Impact and Challenges Ahead Under Changing Scenario

Bipin Bihari Lal
Rural Engg. College
Bidar

Veena Kumari
Akka Mahadevi Mahila College
Bidar

India is the world leader in education. During the British period and basically after independence, arena and vista of education have been opened to one and all. Today general education, higher education and professional education are at crossroads. Education meant alround development of individual's personality, for leading successful life, doing duties and discharging responsibilities properly towards family, community, state, country and the general society as a whole with honesty.

With the advent of modernisation, urbanisation, industrialisation and globalisation, education - its curricula, values, standards etc. have deteriorated to such an extent that individuals of modern education in general are of no use to the work place, society and the nation. Rather all types of orts in family, society and everywhere are spoiling the whole environment and may lead to catastrophic disaster. Accordingly planners and policy makers have responsibilities to have proper education to one and all for alround humanitarian development to have peace, prosperity and happiness in all aspects of life.

Awareness Towards Population Problem - A Cross Religious Study

Saraswati Agrawal
K.V.M. Mahila Mahavidyalya
Kanpur

Present study was conducted on the sample of 1000 high and low educated males and females of various religious groups in Kanpur. The purpose of the study was to measure and compare population awareness among Hindu, Muslim, Sikh and Christian Communities. Self constructed Population Awareness Scale (PAS) was used for data collection. Mean, t-ratio, F-ratio, and Co-efficient of correlation were calculated for analysis of the data.

The results indicate that Christian community has the highest awareness as far as population problem of India is concerned and Muslim community has the least awareness towards the problem. The most aware group is the high educated Sikhs and the least aware group is the low educated Muslim. The high educated group of all communities has more awareness towards population problem than the corresponding low educated group. Within the high educated group - Sikh community is most aware of the population problem of the country. In the low educated group - Christian community has the highest awareness towards the problem and Muslim community has the least awareness towards the problem. There is a significant positive correlation between awareness towards population problem and the level of education.

Vocationalization of Education - Historical Perspective

S.R. Gangopadhyay

C.N.I.P.E.

Gwalior

In the past, vocational education was provided to the sons by their fathers. According to the tradition of the 'caste system', each caste had its separate vocation. The Brahmin youth received training for his future vocation as a priest and a teacher. For the Kshatriyas, importance was attached to the knowledge for war. Vaishya youth received training in trade, rearing of cattle and agriculture. Even the Shudras had some training for their work.

During the Buddhist period, the monks had to know sewing, spinning and knitting. The Mohammedan rulers continued patronising able craftsmen. During the British period, this area was neglected.

The Mudaliar Commission (1952) recommended diversification of courses at the Secondary Stage. Later, the Education Commission (1964-66) recommended two streams - academic and vocational. Government of India accepted this recommendation. To implement this scheme a document 'Higher Secondary Education and its Vocationalization' was circulated by NCERT, New Delhi in 1976. This document was reviewed by Adiseshiah Committee whose published report was entitled, "Learning to Do (1972)". The National Policy on Education (1986) re-emphasised the need of vocationalization of education. Today most of the states implemented this scheme at plus two stage in schools.

After independence, the wave of enthusiasm in favour of technical and vocational education has been steadily rising. Several Commissions were set up to improve the vocationalization of education.

Last but not the least, it is necessary to select those vocations which provide employment opportunities including self-employment. The courses should be based on vocational needs of the community.

Educational Development In India : Role of Education Boards

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Board of School Education

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Nearly every state in the country has its own Education Board, which conducts the terminal public examination at Secondary and Senior Secondary levels. Some of these Boards even conduct a public examination at the Middle level, i.e. after class 8. Whether we like it or not, the Board of examinations do determine the future career of our students. The concept of one time public examination at the end of school education may be criticised by different quarters, but the reality is that the Board examination remains as important as ever.

Lately, the move has been initiated specially after the National Policy on Education 1986, that the Boards should cease to be mere examination bodies and that they take up a greater responsibility and participation in improving and maintaining the quality of education. This has been reinforced by the report of Task Force on the Role and Status of Boards of Secondary Education, appointed by the Department of Education, Ministry of Human Resource Development, Government of India. Interestingly the report is entitled "Remodelling of School Education Boards".

This paper will take a look at the role and status of Education Boards in the country in the changing educational scenario. It will go on to discuss the role that these Boards can play in providing quality school education in the country. It will end with a probe into the ways and means of strengthening the Academic Wings of Education Boards.

A DAV Movement in Education : An Appraisal

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The DAV (Dayanand Anglo-Vedic) is the largest non-governmental organisation (NGO) in the field of education in India. It has established more than 500 educational institutions in the country, with a few of them abroad. The DAV movement was initiated by the followers of Swami Dayanand Saraswati more than 100 years ago, aimed at providing such educational opportunities to Indian youth that preserves Indian culture while imparting western knowledge. The DAV has come a long way from the first DAV college established at Lahore now in Pakistan, by Mahatma Hansraj, a disciple of Swami Dayanand, with the active support of Lala Lajpat Rai, the well known leader of the freedom movement in India.

The DAV is synonymous with the philosophy of the Arya Samaj propagated by Swami Dayanand, which has a large following in contemporary India. The DAV Movement has a place of honour in Indian history and DAV institutions are considered to be involved in imparting quality education with a tilt towards Indian values and culture. The importance of the DAV in the development of Indian education can never be overstated.

This paper will briefly trace the history of the DAV Movement and then delve upon the present scenario of the organisation, its place in the field of education and then go on to make an attempt to assess the future trends in the Movement.

Impact of the Mid-day Meals Programme on Enrolment and Retention of Girls in Primary Schools of West Garo Hills of Meghalaya

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The study attempted to look into the impact of National Nutrition Programme (Mid day meals) on enrolment and retention of girl students at primary level in West Garo Hills. The working of

the WNP scheme, difficulties associated in implementation and likely suggestions for its improvement have also been worked out in this study. The study covered 40 primary schools from rural and urban areas of the three development blocks of W. Garo Hills of Meghalaya state i.e. Dalu, Tura and Rongram. For this purpose headmasters of selected schools, administrators from the state level to block level and the guardians of the students were contacted and interviewed.

The programme on Mid-day meal scheme is the central government grandier dream of attracting children to schools through a nourishing mid-day meal of the Tamil Nadu model. It has run into success even in West Garo Hills of Meghalaya despite many problems. The State of Meghalaya is now distributing dry rations.

For the proper assessment of the benefits of scheme by the centre, better computerised information management system is needed in the state. There have also been problems in transporting the food grains to the schools. Since recovery of the money spent on transport has been slow; the lifting of grains from the FCI godown has been slow. If the village wanted to lift three/four months allotment of rice in one trip, the FCI would not permit and secondly there is no place to store the rice. In this hilly area carrying the food up in head loads is a difficult task and moreover the transport subsidy was found grossly inadequate.

However, if the scheme works as conceived, primary education in the district would get a boost. It is observed from our study that the introduction of NNP scheme is one of the important factors for improving attendance of primary school children. The study reveal that the programme is successful in the areas of Dalu and Tura. However it was not found to be so in the case of Rongram development block as the area still practices Jhuming cultivation. Therefore we feel that there is a need for in-depth study of the problems of girls education in Rangram development Block.

However the district need to be developed economically as it is found to be difficult for the people to meet the private expenditure of the education unless the economic condition is improved in the area, the scheme for education will not give a full impact. It has been observed that majority of the people still following the primitive cultivation system i.e., Jhuming cultivation. In such a case it is impossible to control the dropout rate as they keep moving from place to place. Unless an overall integrated development plan takes place in the district, it may be difficult to achieve universal retention of girls.

The success of any scheme will be visible only when the scheme is implemented for a longer period. Lastly for the better results the following suggestions are :

1. The quota of rice should be increased.
2. It should be given regularly every month.
3. For the smooth functioning of the scheme, the infrastructural facilities like store room, availability of adequate money for lifting the sacks etc. should be improved.
4. Efforts should be made to involve the community to share the work.

The scheme if properly planned and implemented offers promising results especially in the economically backward pockets of the state. However the district needs thorough economic and educational development.

Voices From The Grass Blades

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Only three years and human civilization has to enter a new epoch of history quite unveiled in the 21st Century. The fountain of civilization is education therefore we have to restructure and reshape educational system.

So long it was believed that education was desirable but now it is emphatically announced that education is a necessity. Here arises the slogan "Education for All", Every democratic government should take the responsibility to safeguard the right of its citizens. There is an opposite opinion that education is not for all as every one can not take education because of lack of intelligence and cultural differences.

Following the slogan 'Education for All' there has been vertical and horizontal expansions of educational infrastructure. Children from different cultural bases have to undergo the common standard test. The inevitable result is low percentage of success. Children being not upto that standard have to fall back upon compensatory education, (private tuition, coaching etc.).

Democratisation of education is now conceived as reaching educational facilities to largest number of citizens. But almost all the western and eastern educationalist including Rabindra nath Tagore prescribes education in child's own natural environment.

So all the citizens of the world should be provided with variety of opportunities, variety of experiences that they may unfurl their minds and feel ecstasy of joy in an intrinsic democratic environment of the universe otherwise man's material comfort will be at its peak but he/she will lose heart and hence compassion to his fellow neighbour.

We have to think anew to give the world a new education system where every son and daughter of this planet will flourish and nourish with a new mind in a new divine body.

Community Participation and UEE : A Fresh Look

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Education is the nutrient of society. That's why the framers of the Indian Constitution pleaded for Universalisation of Elementary Education and accepted it as an ideal target to be pursued and realised in the specified period of time.

There is no doubt that UEE is a laudable goal but it is to be understood that it is a stupendous task. It is natural that the realization of the UEE appears to be elusive in character and evasive in nature. Governmental efforts alone cannot help. Even UNESCO assisted projects and liberal World Bank and ECM financial assistance cannot serve the purpose. The tangible and intangible criteria and measures of UEE demand and deserve a concerted endeavour of all Governments - National and State, NGOs, Municipal bodies, Panchayat Samiti and Zilla Parishad.

Without active participation of the community and in the absence of sincere and sustained community involvement UEE will remain unrealised and unachieved. Community participation holds the key to the success of UEE and it can in a joint effort help in realization of the goals and targets.

The present paper analyses the performance of UEE and community participation in the five decades of Independence and suggests measures and strategies for strengthening and streamlining the role of community participation in the field of UEE. A fresh look is the need of hour!

Impediments in Switching over to Novel Methods of Teaching by Primary School Teachers

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The attempts to compare the government and private school teachers regarding their change proneness towards novel methods of teaching.

Objectives: To study; (i) whether teachers belonging to different age groups and different lengths of service differ on their change proneness towards novel methods of teaching, (ii) whether government school teachers differ from public school teachers on their change proneness towards novel methods of teaching, (iii) the relationship between teacher attitude and teacher change proneness towards novel methods of teaching among teachers belonging to different school management, (v) whether teachers belonging to different levels of teacher attitude differ on different areas of teacher change proneness to novel methods of teaching.

Methodology: The sample of the study comprised 124 primary school teachers drawn from 15 schools covering 8 government schools and 7 public schools. Both the types of schools had equal representation of 62 teachers. The teachers ranged in their age from 23 years to 59 years with a mean age of 36.6 years. In terms of experience/service, teachers varied from less than one year to 39 years, with a mean experience of 10.3 years.

The tools used in the present study include, Neera Teacher Change Proneness Scale (1997), developed by Mrs. Neera Chopra, Teacher Attitude Inventory (1971) developed by Dr. S. P. Ahluwalia and a Personal Data Blank.

Major Findings: (1) Teachers belonging to different age groups did not differ significantly on their teacher change proneness. Hence, age is not an impediment for change.

(2) The teachers having different lengths of experience also did not differ on their teacher change proneness. Hence, experience is not an impediment for change.

(3) The teachers belonging to two different management types differed significantly in favour of the public school teachers on teacher change proneness. This implies that the public school teachers are more akin to change than the government school teachers. This calls for removing the rigidity/resistance to change among the government school teachers.

(4) Teachers (inclusive of public and government schools) have shown a linear relationship between their attitude towards teaching and their change proneness towards novel methods of teaching. While the public school teachers have not got the significant relationship between the two variables, it means that the public school teachers irrespective of their attitude towards teaching, are inclined towards shifting over to novel methods of teaching.

Universal Elementary Education

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Education is the basic tool for the development and improvement of a human being. It helps an individual to realise his/her inherent qualities and transform the entire personality. The universalisation of elementary education (UEE) is essential for the strengthening of a nation.

For the success of universalisation of elementary education, the emphasis has to be given on :

- 1) Universal enrolment and retention of children upto 14 years of age.
- 2) Substantial reforms for upgrading the quality of education.

The universal enrolment of children includes girls and children belonging to SC/ST community. There should be the provision of primary schools for children within one km of walking distance and also facility for nonformal education for school drop-outs and others who could enter the schools.

For successful universalisation of elementary education, the paper has suggested some useful steps and strategies.

Whither Non-Detention System?

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The system of automatic promotions or the non-detention system which is in operation in the school education level right from 1971 in Andhra Pradesh, is still a controversial issue. It has evoked and is evoking mixed reactions from the educational elite of the state as well as of the entire nation. Some contend that examinations and detentions are necessary, if not essential, in any education system, while others denounce them in toto. This paper aims at a comparative analysis of the attitude of students, teachers and administrations towards non-detention. A study of the attitude of these three groups may throw light on some salient issues related to the system of automatic promotions.

Stratified, systematic random sampling technique was adopted in the selection of students, teachers of urban and semi-urban localities, and administrators, whereas, cluster sampling technique was followed in the selection of teachers from rural localities. The sample consisted of 1080 students, 510 teachers and 40 administrators distributed over 54 schools of three regions (Rayalaseema, Telengana and Andhra) of Andhra Pradesh state.

The attitude of pupils, teachers and administrators towards the non-detention system was measured by means of a standardized attitude scale developed for this purpose. The data were analysed by applying one way analysis of variance.

It was found from this analysis that there was no significant difference between these groups with respect to their overall attitude towards the non-detention system. Students, teachers and administrator in general, though had a negative attitude towards the system, there are certain aspects like personality, incentive for progress, dullards-wastage and stagnation, learning in a natural setting etc. where they had a positive attitude. Some of the factors responsible for the negativeness to non-detention system include policy implementation, teaching-learning, learning skills, emotional factors, ethical values, freedom and competence.

If non-detention system is to be continued, it is necessary to take planned efforts and programmes to eliminate all sorts of fissiparous tendencies among the students, teachers and administrators so as to create a proper and conducive atmosphere for its effective implementation designed to yield the desired results.

Implications of Childhood Experiences : A Socio-Psychological Approach

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The elementary school is a period of growth in behaviour organization. Therefore, it becomes imperative that whenever we make a policy of education we should take into account socio-emotional needs of the child and subsequently look for intellectual abilities. Teachers need to know as much about developing emotional adjustment as they do about teaching subject matter. Though teachers make significant efforts for literacy accomplishment, they remain non-committed towards the emotional aspect. It is just like making robots with no feelings, the human element is missing. We cannot have remote control kids.

There is in fact no debate on the issue whether becoming literate is more important or having a balanced personality. They should go hand in hand. There is an urgent need for bringing attitudinal changes among primary school teachers before they produce mechanical object, like individuals. All the literacy campaigns should undoubtedly strive for personality development with reference to emotional stability.

Free And Compulsory Education for All Children

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In order to think over the modern concept of "Education for All", we would have to remember Gandhiji's Basic Educational Plan (1937) and the decision taken by the conference of nine countries - India, Bangladesh, Pakistan, China, Egypt, Mexico, Brazil, Indonesia and Nigeria - held at Delhi on 16th December, 1993 regarding Education for All.

In this paper the author proposes that the title "Education for All" is not suitable for our purpose. If it is taken as "Free and Compulsory Education for all Children", it will be more specific and illustrative. There are three main features of this new title -

1. For all Children
2. Compulsory Education
3. Free Education

For All Children : For all children we mean all the children upto 14 years of age. Plato considers education to be totally governed by the state. In a developing country like India, the target of educating children upto 14 years of age, till 1960 has not been achieved yet in 1997. In order to solve this problem, it is essential to count total number of children of this age group throughout the country and to open adequate number of new well equipped schools for them. For this purpose we should completely discard the private management at the primary and junior levels. We should open a large number of schools of equal but high standards, fully governed by the government.

Compulsory Education : Education is worship. It requires a great desire, anxiety and lot of hard work. So it may be possible that some parents or children may not pay proper attention in providing education. In that case, either they take interest or not, the education should be strictly compulsory. We will have to form certain hard rules in this concern, as well as good atmosphere, so that the parents and children take part in this movement at their own will.

In such schools, the curriculum, games and extra curricular or co-curricular activities may differ according to the local needs and capabilities, but as far as the physical amenities and standards of teaching is concerned, there should be similarity and equality.

Now a days we are facing two types of schools. Some of them are very rich while a large number of schools are in very poor conditions. This dissimilarity is creating partiality, disappointment and corruption in the society. The only way to get rid of all these evils, is to educate the whole community of children with equal but standard educational system.

Free Education : In fact, there is no free education in India. Where there is some education, it is not free and where it is so called free, there is no education. In order to overcome this problem, there should be a law that under any circumstances, it should not be allowed to run primary or compulsory education under private management. The government should bear the total expenditure of such schools.

Economic Resources : It needs a huge amount of money to make primary education free. This major problem may be easily solved by imposing a general 'Education Tax' on the parents. The poor parents may be exempted from this tax. This loss can be compensated by taking more tax from richer population. The help of charitable institution and donations from industrialists, merchants and other persons may also be accepted to fulfil the economic requirements.

If we apply the above mentioned reforms, it is sure that we may have a good free and compulsory education for all children.

Classroom Managers at the Grass Root Level

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The present research paper is based on the nine case studies of teachers who were awardees of NCERT during 1992-1995. The attempt was made to identify their psycho-social traits as well as their educational professional background. Efforts were made to highlight the genesis, planning and execution of their innovative work along with their classroom/school management behaviour. The NCERT award received by them was found to be just a coincidence; infact they were recipients of many other national/state/district/block awards. These teachers, it appeared from the data, were born innovators. It implies that innovation knows no culture as these teachers hailed from diverse cultural background like extreme deprived rural to modest urban societies. Simply they were guided by their inner impulse. It was also found that they searched their facilitators by their own efforts from the environment they lived in. These self-searched

facilitators became instruments in furthering their work. It was also revealed that they had a positive impact in facilitating teaching - learning process in the classroom; that is why the achievement of their classes had been cent per cent during the last 3 years. They had also contributed significantly towards community welfare activities.

Keeping in view the research findings, it is now time to recognize their talent and give them their due status in the society. The present research paper throws light on many educational implications for policy planners/educational administrators.

Education for All

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Trudi Van Wyk

TCDE, South Africa

Focus : In a joint presentation by the Head of the Department of Education: National Institute for Lifelong Learning and Development (NILLD) and the Rector of the Technical College for Distance Education in South Africa (Technisa) focus will be on Partnerships in Education for All.

The paper will argue the necessity of partnerships between government and institutions; government, institutions and Industry/Community and how this could be vehicle to take integrated education and training to all in the coming century.

Partnerships need to include :

- partnership regarding needs analysis;
- partnership in curriculum design and courseware development including the use of supporting media such as audio and visual;
- partnership in delivery and student support including use of technology;
- partnership in preparing all relevant staff and other role-players firstly for a paradigm shift and secondly for skills development and the "learning revolution".

Content

The paper will focus on the different aims mentioned under point 2 and will illustrate not only the meaning of each but also the possible practical application of each with emphasis on an outcome-based approach.

Outcome

The paper should have the outcome that delegates :

- make a paradigm shift towards outcomes-based, student-focused approach
- agree with an integrated approach of teaching and learning;
- agree that the principles of Lifelong Learning form the basis for Education for All.

Education As A Human Right : The Trojan Horse of Neo-Colonialism

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In the post-colonial era following WW II, millions are being schooled to claim education as one of the basic universal human rights. Part of this claim entails the globalisation of schooling, with access to it being made as far-reaching as the encroachments of the global economy.

This paper explores challenges to the western ideals of 'education' and 'human rights' in and through the exploration of indigenous knowledge systems/traditions. This challenge gives special attention to cultural ideals of indigenous communities or nations in India and Mexico. It explores indigenous cultural alternatives to the western ideals of 'knowledge', 'human right' and 'education'. The argument is made that these indigenous culture's alternatives are actually incompatible with the idea that education is a human right and, furthermore, that the importation of this idea involves hosting the Trojan Horse of neo-colonialism.

Universal Elementary Education

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Education is one and only powerful instrument for development. Education provides liberation from ignorance and oppression. In spite of the Constitutional guarantees, recommendations of various committees and commission, we are unable to reach the target. Achieving the target of universal elementary education should not only be the concern but providing equal and good quality education for all - should be the need of hour.

Impact of Adult Education on Women : A Comparative Study of Three Implementing Agencies in Andhra Pradesh

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Gender Sensitivity and Barriers in Education - An Overview

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The assumption of women's inferiority goes back a long way: "the female is female by virtue of a certain lack of qualities" declared Aristotle. Subordination of the feminine to the masculine seems to have been the necessary condition for the functioning of the social machine. Alternately worshipped and reviled down the ages as goddess and demon, treated little better than a child-bearing slave, she was advised to hide her learning for fear she be considered unfeminine. As late as the 19th Century her main function was to be an ornament to society. The period of colonial expansion of the 19th Century created a considerable scarcity of eligible young men and surplus unmarried women had to fall back on their own resources. A specialized education became the necessary means for earning a livelihood. As a result the number of women's colleges went up in the later half of the 19th Century in both England and America although acceptability in the all-male campuses was denied them till the 20th Century.

Changing family patterns and the acquisition of franchise have done much to change the status of women but it is education which has a direct bearing on social position. Many schemes have been initiated by the United Nations and other government and semi-government agencies in both developed and developing countries. Yet social pressures and limited professional choices restrict the educational options of women. They are denied university education because they are seen neither as the breadwinner nor in the final analysis the determinants of the socio-economic status of the family. In India a statistical survey shows that whereas the dropout rates for boys in the year '93-94' in Class I-X was only 68.4%, for girls it was 74.5%. Enrolment of women students per hundred men in '94-95' was 33.6% of the total enrolment at the graduate level, 35.6% at the postgraduate level and 38.6% at the research level.

No radical changes are however possible without education. It is high time that women's education on all levels - primary, secondary, higher - be taken up as a priority issue. It is the only means by which woman can be empowered to create a society where she will be assessed on personal merit without discrimination on grounds of gender and class.

Educating the Disadvantaged : A Case Study of Mahamana Malviya Vidyalaya

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The Preamble to the Constitution of India, promises among other things -- "Equality of Status and Opportunity of All". Inspire of 50 years of independence and untiring efforts of all we can not claim of having attained the above goal in toto. Increasing our efforts in that direction is then the need of the hour. It is not that no efforts have been made in the direction of giving equal opportunities to all. The Government of India, various State Governments, several Non-

Governmental organisations, philanthropic associations and individuals tried to provide equality of opportunities in every sphere.

The Indian society has from time immemorial some sections which have not been able to enjoy equal opportunities in any sphere of life due to various reasons. Leprosy has been one of the most dreaded and shunned disease in India. Its patients along with their families have faced ostracization of the worst kind. This has placed them in the disadvantaged class of the society. The efforts of Dr. Shivajirao Patwardhan started the Tapovan Centre for Cure and Rehabilitation of leprosy.

Starting from humble beginning the Centre has achieved much in the direction of its cherished goals. In this line Dr. Patwardhan established a school for the educational requirements of children of leprosy patients of the centre. This school has given yeomen service in providing an opportunity of formal education to these children. The school was recognised by the Government in July 1962 under the name of Mahamana Malviya Vidyalaya. Ever since scores of underprivileged children have passed through its portals gaining knowledge and education which was denied to them earlier.

This paper will undertake a detailed case study of the school, its beginning, quantitative and qualitative growth, problems encountered, solutions worked out, help received, future requirements etc. and attempt to systematically analyse the facts going into its successful organisation. It will also attempt to bring out the results achieved by this effort in bringing the underprivileged class at par with other sections of the society. The paper can thus provide insight into laudable efforts of fulfilling a promise made in the Constitution of India.

Prioritized Groups : Educational Issue and Challenges of Globalization

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Economic, social, political and technological changes are so fast that allows no time to people to respond in an appropriate way. Especially in the context of global challenges, liberalisation of economic policies and demand of great potential of Indian market education of above group becomes of prime importance.

This paper reviews present education scenario of the prioritised groups in India -- its problems and potentials. According to the authors of this paper, the proposed changes will provide education for all--Open education, will be self financed-self supported, enabling people to enjoy higher riches of life. Simultaneously it will bring about harmony with nature and universe, reducing environmental pollution. This system will develop fortitude in people to withstand the calamities of life, society and nation.

Authors are of the opinion that the eighty five percent of total education should go to core education, common for all, concerning development of human skills. Rest fifteen percent to satisfy local needs of society, industry and individual. Authors believes in creating an environment in which learning takes place effortlessly on bringing out and developing what is already there in learner education cannot neglect the huge importance of perceptions, beliefs and local truths. At the same time critical search for absolute truths lacks the creative design and constructive energies that century badly needs. The present education based on traditional thinking exacerbates the worst deficiency of the human brain and hence need gradual change over. To value building education.

The proposed scheme of education insist on proper co-ordination of three skills at different three levels of employment.

Three skills	Human skill	Conceptual skill	Technical skill
Three level of Employment	Low-level Management	Middle-level Management	Top-level Management

Finally paper assesses the influence of said education of prioritized group on demand and supply using relevant economic indicators.

Gender Disparity in Literacy India

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Literacy and education are indicators of the development of a society. Many studies have shown that investments in education yield the highest rate of return and have a significant impact on the quality of life of the people. After independence, India has devoted pointed attention to the objective of achieving the universal literacy through the effective implementation of the Five year plans. The target of universal literacy is however, still far from being accomplished. Gender disparity in education and literacy is an historical phenomenon and can be attributed to several economic, social and cultural compulsions. In recent years, momentum has been gathering all over the world, demanding gender equality and push for equal representation of women in all spheres of activities including education, political, cultural and economic.

There have been many special drives in respect of literacy promotion like Farmer's Functional Literacy programme, National Adult Education Programme, Mass Programme of Functional Literacy, 'Total Literacy Campaign of National Literacy Mission etc., all giving emphasis to women as the priority group among others. Significant progress has been made in this direction, the literacy rates have progressed over the period, but the absolute number of illiterates has also gone up.

There has been a continuous progress in total, male and female literacy rates in the previous decades. It can be seen that though male and female literacy rates have increased over the period, there has been an undesirable continuance of gender disparity.

The paper tries to examine the literacy situation of male and female in India with respect to change in literacy rate over the period 1981 - 1991. An attempt has been made to highlight the situation of gender disparity in India by analysing in detail the total, male and female literacy rates of rural, urban and all areas in 1991. It also intends to provide an insight into the correlation between the rank of literacy rates and gender disparity.

Impact of Women's Education on Political Alienation An Empirical Exploration

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Educating women is not a charity; it is good economics if the nations want to abolish poverty. The economic and social return on investments in education of women are substantial and on the whole probably greater than those for men. Today education has become a priority, a tool of social change through which the future of women can be shaped. Out of the total population of 960 million, only 1.35 million women are literate (15%), which resulted in a poor socio-economic as well as politically backward section who needs immediate attention. Lot of projects have been launched in the past for empowering women (the recent one is the 33% reservations for women), unfortunately women are not able to take the benefit fully due to poor education coupled with poor socio-economic status. The study (based on the sample survey of 1520 women from Malwa region) measures how the women's education (level) of various age, caste, income groups, professions, status directly affect the political alienation process (a psychological and behavioural process) which is very unfortunate in a democratic system. Lot of statistical tools like Chi-square, t-test, z-test, regression analysis have been used to identify the causes of alienation in women. It has been observed that level of education have direct relation with alienation process (inversely proportional). Paper identifies that political backwardness create a hindrance to empowering women who constitutes 50% of the total population. Suggestions are given to educate women through formal and informal education systems. Also action lines are drawn to educate women, to give them full justice on economic, social and political level. The paper concludes that the mega task of educating women from literacy level and political level should take the help both from governmental and non-governmental organisations.

Higher Education For Women A Case Study of American College, Madurai

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The role of women in a society is very important. All of us are aware that women's education is the key to a better life in the future. The recent World Bank report says "The economic and social returns on investments in education for girls are substantial and on the whole probably greater than those for boys". There has been a constant search for a unique policy and programme for women and naturally the priority is given to education because education is a tool of social change through which the future of women can be shaped. This is also in turn supported

by the view of equality, because today equality of sexes is regarded as the basic tenet of modern democracy, especially in the context of the Indian social reconstruction. A woman perceives herself to be productive and constructive unit of national development. Hence the educational system must be geared to meet all the needs. The Committee on Status of Women (1964) stated that "In the progressive society of tomorrow, life should be a joint venture of men and women. Men should share the responsibilities of home and women in turn should share the social and economic responsibilities of men. Major constraints in women's education are poverty, social structure, lack of ideal curriculum, lack of infrastructure etc.

The study covers Post Graduate Departments of American College, Madurai. The American College was established in 1881 and at present there are more than ten PG Departments engaged in promoting higher education in this areas. Post Graduate courses in Chemistry, Zoology, Mathematics and Botany are dominated by women students only.

Reaching Out To Special Groups – Challenges For Distance Education

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It is now accepted that without the efforts put in by open learning institutions, the education, training and continuing education needs of a vast majority of our population cannot be met. Distance education with its openness, flexibility and its potential to be as creative as the varied learner needs coupled with the advances in educational technology, is eminently suited to addressing issues which commonly do not find a niche in the conventional system of education.

Two such areas where distance education can step in effectively are – child labour and disability. This paper seeks to outline broad thrust areas for course design and methods of delivery. The following description gives an overview.

As regards child labour, a long term perspective cannot be anything other than its elimination. But in the time period in which that is made possible, there are many levels at which educational institutions can intervene. Course development can have as its focus the children employed as labour, professionals working in this field in government/ non governmental organizations and people in general. The programmes to be developed can range from (i) those providing functional literacy, vocational skills in 'safe' occupations, primary, secondary and higher education to the children employed as labour, (ii) awareness programmes for the people in general, and (iii) sensitization and continuing education programmes for the professionals in the field.

A similar model may be employed when designing courses addressing the issue of disability. With community based rehabilitation as the main focal point in the rehabilitation of the disabled, distance education is uniquely placed to complement the efforts of special schools for disabled children. Using the educational technology, among other resources, distance education courses can effectively equip the family and the community to cater to the needs of its disabled members within the family and the community.

The paper would also describe mechanisms of delivery - particularly in context of involving the NGO's in design, development and delivery of courses, the partnership model in course delivery and the use of educational media.

Developments in Education **Education for Prioritized Groups : Girls from Difficult Pockets**

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Government of India is making continuous efforts in the improvement of education both in terms of extending the opportunities as well as improving the quality. However, even today there are problems in the attainment of basic literacy skills. The issue is more alarming when it comes to the education of girls. India had a female literacy rate of 8.86 in 1951 which is now 38.19 according to 1991 survey. Still there are more than 10 such big states where the female literacy rate is not only lower than the national level but in certain pockets it is less than 3 per cent. There are 125 such districts where female literacy rate is only 16.29 or below.

This paper is an attempt to make a case study of the conditions which contribute to continuous low literacy rates of girls trying to establish a case as to what type of interventions can pave the path for increasing the participation of girls in such areas.

The detailed case study of two sample districts have suggested that the key solutions lie in understanding the disadvantaged groups in their specific context and working on solutions which will be able to attack the problem at their roots. One such measurement can be flexibility in the standards for providing educational facilities. The second is using context specific incentives for increasing motivation for education. Third is recognition of the lacunae of absence of role models in immediate environment leading to neutral attitude towards education and last but not least in selecting carefully the change agents in such difficult areas.

Women Rights Education : A Plea for the Neo-literates

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India envisages a greater participation of women in the state affairs by the turn of this century and this resolve is evident from the various steps taken by the government. Various legislative measures have been taken to ensure women representation in the decision making process right from the village panchayat level. Moreover, a legislation is in the offing reserving 33% of seats in the union and state legislators. But basic constitutional and legal rights of women are not known to a vast section of Indian women. And it is universally accepted that without proper awareness about their rights and constitutional safeguards, mere participation in the legislative process will not ensure proper upliftment of India women. The situation is more crucial in case of women who have been imparted literacy under mass programmes like Total Literacy Campaign (TLC).

Against this backdrop and at the doorstep of twenty-first century this paper pleads a case for the millions of rural poor women of India who have been able to see the light of literacy but still to get any kind of Women Rights Education. The paper studies the background of Women Rights Awareness among the Indian women and suggests the necessary post literacy drive for awareness generation.

Towards Gender Equality : Present and Future Perspectives of Girls Education in Goa

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The focus of this paper would be to consider the present status of female education in the State of Goa from pre-primary to university level.

The following aspects will be examined against the urban and rural setting of Goa :

- a) Enrolment and Drop-outs.
- b) Curricula and text-books.
- c) Co-education.
- d) Socio-economic policies
- e) Choice of Courses.
- f) Human Rights.
- g) Gender Attitudes.

The future prospects and perspectives for the empowerment of women in Goa and the eventual elimination of gender inequality will be highlighted.

Education for the Socially, Economically and Educationally Handicapped

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After briefly introducing three types of handicaps, the paper deals with the present scenario regarding their education. Like the aim of non-arisal of any further problem, for any good solution to a problem, the paper identifies that, the effective solution to the problem of education for the handicapped should aim at permanent eradication of handicap, i.e., there will not be any schedules of castes or tribes or other backward classes, resulting in the end of the need for reservation. The paper identifies 'reservation' as the provision of clutch to a limp, making the limp permanently invalid, without curing him. The paper evolves a special education for the handicapped. Alternatively the paper suggests provision of Post Secondary Career Development Programme, in the lines of practice in Manitoba, Canada. The paper also stresses the need for training of teachers either in special education or Career Development Programme for the success of the efforts.

A Study of the Impact of Education on the Changing Roles of Women

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With the advent of industrialisation and urbanisation, there has been a tremendous change in the Indian Society. There has been a gradual shift in the family system i.e from the joint family to the nuclear family. A lot of impetus has been given to the education of the women. More and more women have stepped out of their homes for education and pursuit of career. Our ancient scriptures have also stressed the importance of women education.

The resolution on the National Policy on Education (1968) has also stressed the importance of women education in these words, " The education of girls should receive emphasis not only on grounds of social justice but also because it accelerates social transformation".

Hence 'A study of the impact of education on the changing roles of women' was undertaken.

The main objectives of this research were :

- 1) to study the changing roles of women in a changing society, and
- 2) to find out the expectations and attitudes of the members towards the changing role of women.

Data were collected through questionnaires and the sample consisted of 212 career women and 202 non-career women. Majority of the career women were in the age group of 20-39, whereas, majority of non-career women were in the age group 20-44. Majority of respondents from both the categories i.e. career and non-career women were married.

Some of the major findings of the study are :

- 1) The qualifications of the career women showed interest in addition to the academic qualifications in the arts stream and not in the science stream.
- 2) The priority given to the role of the mother is high both among career and non-career women.
- 3) Both career and non-career women received more co-operation from husbands and children. Very few respondents received co-operation from sisters-in-law and brothers-in-law.
- 4) Majority of the career women stated that the reason for taking up a job was to provide for extra comforts for themselves and for their family whereas a majority of non-career women stated that there was no need for them to work.

Impact of Adult Education on Women : A Comparative Study of Three Implementing Agencies in Andhra Pradesh

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The world of today is undergoing a rapid social, political, economic and cultural transformation due to the scientific and the technological advances and explosion of knowledge in various spheres. For better adjustment to the changing environment, education should not remain a closed circuit and must reach the whole society. Non-formal ways of providing education through the nation wide campaigns of literacy is occupying top priority on the policy agenda of different countries all over the world. The intriguing concern, however, is the incidence of high rates of female illiteracy especially among the developing countries 40.2% as against the male illiteracy rate of 22.4% (HDR, 1996). Realising the gravity of the problem the United Nations called for "engendering the Human Development paradigm" and aptly summed up—" Human Development if not engendered is endangered" (HDR, 1995). India with a female illiteracy rate of 38% ranks 135 in the world with regard to Human Development Index, of which "literacy" is an important indicator (HDR, 1996). Various strategies and approaches to ameliorate the situation were experimented with, right from 1978 when the first Nation wide adult education programme was launched, till today. The current "Total Literacy Campaign" (TLC) is in operation in 336 out of 448 districts planned in 20 States and 4 UT's in India (National Literacy Mission, 1996). Andhra Pradesh, an educationally backward State with a female literacy rate of 34% (Census of India, 1991) presents an all the more dismal picture. The TLC, which is in operation, in 22 out of its 23 districts aims to achieve total literacy by the year 2005.

The government commissioned about 88 evaluation studies (Ila patel, 1996) to study the various facets of the programme. But, issues in women's education appears to be relatively neglected area both at the policy level and the research level (Vibha Joshi, 1996). Moreover, no extensive or intensive evaluation has been commissioned/conducted by any national agency/individual in the state of Andhra Pradesh, not to speak of women's literacy or inter-agency comparisons. A study was conducted to fill this gap, with the objective of understanding the processes involved in the implementation of the adult education programme for women in A.P. as implemented by three major implementing agencies--the government, the UGC sponsored programme, and an NGO-MARPU. The specific objectives included :

- a) the attitudes and perceptions of women learners towards the programme to examine the problem of motivation.
- b) to examine the impact of the programme on the beneficiaries.
- c) to make a comparative evaluation of programme implementation/impact as administered by the three agencies to examine their performance, achievements and shortcomings in relation to the objectives of the programme.

A total of 854 respondents from the three agencies provided the sample for the study. Structured and unstructured schedules and scaling techniques were deployed for data collection.

The results of the study clearly indicated that :

- a) absence of proper environment building and organisational support has affected the learners' perception of the purpose and content of the programme and limited the impact/benefits of the programme to the acquisition of limited "literacy" skills alone.
- b) the motivation and interest in the programme could be sustained only when the learners realise the "welfare" equivalence of the programme and only when a "demand" for adult education is put forward by them.
- c) in the final analysis, a comparison of the three agencies revealed that the NGO-MARPU has emerged as the single implementing agency to have made the desired impact not only on the social and economic lives of the women but also displayed "exemplary" approach in the planning and implementation of the programme.

The results clearly indicated that the efforts of the NGOs should be carefully studied for the possible inputs into the government sponsored programme to realise the goal of "Education For All" by the year 2005.

Essential Elements of the Mental Health for the Well-being of Adolescents

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The change in socio-economic and political scene and developments in science and technology have brought about changes in the lives of the people. These require newer approaches to the problems both at micro and macro levels. But the components of our social system are reluctant to cope effectively with these changes. One such is the education setting. In spite of the tremendous increase in the number of schools and the emergence of newer problems relating to students, society will expect the teacher alone to shoulder all responsibilities of maintaining the activities of the school.

Many of the problems faced by the students of the secondary schools can be understood by applying mental health principles and approaches.

The following approaches are elaborated in this paper :

- a. School counselling or school social work
- b. General mental health orientation to school teachers
- c. Counselling skill orientation to teachers
- d. Mental health education to students
- e. Student enrichment programmes
- f. Life skill education for children, adolescents in schools
- g. Family life orientation to high school students
- h. Strengthening Parent Teacher Association (PTA's)

- i. Incorporating the mental health package programme in the teacher training curriculum.

By incorporating these approaches in the school curriculum it is possible to promote the competence of students, prevent mental health problems, identify the problems of the students of early stages and strengthening the teacher's potentials as counsellor.

Educating Refugees : The Role of Distance Education

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Refugee problem today has assumed truly gigantic and global proportions. Today there are some eighteen million refugees in the world. The majority of the refugees are in Asia and Africa. Refugee communities are characterised by large population of women and children, thus with a large proportion of school-age children. Although virtually all refugees initially expect to return home, sooner than later, very often large number of them are unable to return for months or years to come. But, while waiting for the day when all their woes will end, they encounter with a number of problems. One of these is the lack of education for their children and themselves. This is true that the Third World host countries accept the right to education of refugee women and children but these countries are too poor to provide mass education to refugees. Furthermore, refugee schools where they exist are staffed with untrained or under-trained teachers, rendering poor education. In addition to it, the Third World host countries do not have adequate provision for their own nationals, and certainly can not accommodate large influxes of refugees. When there is the possibility of places in local schools, very often many refugees do not make use of them because of language differences or differences in educational standards. Refugee camps lack adequate physical facilities such as classrooms, offices and libraries. To provide training to teachers in the conventional system takes long time. In order to join a teacher-training institution, a refugee would need a good academic background. The question is, how do we meet the demand for education of the refugees under these constraints? Distance Education has proved to be a potential means of providing opportunities for education and training. Experience in expanding access to education shows that distance education as a system of delivery is feasible, especially where financial and other resources are limited. Can this system help us to overcome the barriers of educating the refugees? This is what the paper would highlight upon.

Formal and Informal Education of the Socially Disadvantaged Girl Children Including Girl Child Labourers : Some Fruitful Experiments

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For more than a decade the ISDGEI has been conducting experiments in the teaching learning process of the socially disadvantaged girl children belonging to SC, ST and extremely poor Muslim families. The objective was to find out the reason for the children from these groups in not benefiting from the formal education. For instance, according to 1991 census, 61 per cent of the children in the age group of 6 to 9 years and 50 per cent of the children in the age group of

10 to 14 years are out of school. Incidentally almost the entire out of school children belong to various disadvantaged groups.

Initially the ISDGEI set up an experimental Balwadi in a slum in Kolhapur inhabited by illiterate disadvantaged communities. A year later a primary school was also set up. Since there were a large number of grown up illiterate working girls in the slum, the Institute also set up an Open School in which 10 to 14 year old girls both married and unmarried were enrolled. For not disturbing their work schedule, the classes were kept open from 11 a.m. to 8.30 p.m. The working girl children could come to the class whenever they are free from the other activities. The admission is open through out the year. The efforts have been to prepare them to appear at the IV standard examination of the municipal school board within 2 years of their admission and in another two years the VII standard examination. So far 8 batches of girl children were sent to these examinations with none failing and many securing between 55 and 70 per cent marks. Some of the working girl children are now studying in classes 9 or 10. The Institute also conducts night schools in different slums for the full time girl child labourers.

The Institute's experiments revealed that the school related factors and the negative stereotyped attitude of the teachers towards the disadvantaged children account for more than 88 per cent of the reason for these children not benefiting from formal education.

Among school related factors include the school timing, demanding date of birth and transfer certificate. Their most important handicap being the thrusting upon them the academic programmes conceived for another cultural universe.

The Institute took care of all the factors adversely affecting their education and produced an enviable record. These include :

- 1) Nil drop out i.e., the disadvantaged girl children who sought admission at the creche units at the age of 2 + continue till they pass class 7. Thereafter their mothers are persuaded to enrol the girl children at class 8 in the neighbouring high school.
- 2) Though every child is a first generation learner, the children from class 3 onwards can read with comprehension non detailed books and Marathi news papers.
- 3) Total stopping of child marriage. Earlier girls got married between the age of 8 and 10 years.

Galvanizing General Education System through IEDC - Experience Sharing for EFA

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The need of galvanizing and mobilizing general education system to meet educational needs of all children including those with physical, mental, sensory or cognitive deficits has been accepted by all the national and international policies on education. In Salamanca Conference (1994) education of SEN with their normal counterparts was termed as 'Inclusive Schooling'. In

India integrated education of disabled in common schools is taking place since 1974 under the centrally sponsored scheme of IEDC. We intend to move towards inclusive schooling.

A survey was conducted by the NCERT in 1989-90 to evaluate the scheme of IEDC. Based on the results the scheme was revised in 1992. Meanwhile the NCERT implemented innovative research project with the help of UNICEF funds. This project was known as PIED. The modus operandi adopted under this project helped galvanising and mobilising general education system for EFA. The experiences of PIED were utilised in IEDC implementation.

The paper intends to discuss the developments in the IEDC in the country. It also discusses the extent of involvement of different states in integrated education of disabled, participation level of common schools, enrolment ratio of different types of disabled children in these schools, and their sex wise and disability wise composition. It also includes the impact of resource support provided by special teachers and resource room facilities in imparting plus curriculum skills. This evaluation is based on the empirical data collected by the author from the states for the years 1991-92 to 1994-95. About half a dozen tables and graphs have been developed to present the data.

In a recent effort, as a sequel to India's firm commitment to give 'Full Participation and Equality of the People with Disabilities in Asia and Pacific Region', the Govt. of India enacted the legislation 'The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act 1995. The act among other things, deals with the education of disabled in a comprehensive way in its chapter V, section 26. In the light of this, the paper suggests research based interventions and strategies to be adopted for EFA and inclusion of some of the essentials in the scheme of IEDC, proposed to be revised during this year. All this will help in galvanising general education system for EFA through IEDC.

Female Literacy and Education of Girls at the Elementary Level - A Comparative Study of North Eastern States of India

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This paper is based on a DPEP study on the status and problems of elementary education in the North Eastern States of India conducted by the author through extensive field work and analysis of both primary and secondary sources of data.

It hence traces the development of literacy and elementary education in the historical context in which both governmental policies and missionary efforts had contributed to the growth of literacy among only a few tribes, thereby resulting in inter-tribal and inter-district disparities in both female literacy and girls' education. This is despite the non existence of a gender bias against female education in the states such as Mizoram where female education is encouraged on account of the economic benefits which female and girls' education can accrue.

The paper concludes with some case studies on non-participation of girls at the elementary level due to both sociological factors and those related to faulty curriculum design and poor infrastructural facilities in elementary schools.

Development of Girls' Education in Gujrat State After Independence

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India got her independence in 1947. Before independence there were 572 royal families in India. They have ruled their own states in their own way. So there was diversity in education. After 1948 February, royal families were merged in one state. In 1960 Gujarat state came in existence.

Research aimed at studying the development of girls' education at all the levels i.e. primary, secondary, higher secondary and higher level after 1960 in Gujarat state. It can be said that in 1960-61, percentage of girls compared to boys at primary educational level was 35, at secondary level it was 25 percentage and at higher level it was 09 percentage. Girls' education developed year by year. In 1994-95, at primary level it became 42 percent, at secondary level 38 percent at higher secondary level it became 40 percent and at higher level it become 43 percent. As per 1990-91 census report, it is noted that men and women are approximately equal in numbers but in education yet much effort is necessary at development of girls' education .

Unfavourable variables for development of girls' education were (1) orthodox mind of people, (2) boys do not take more education, and they do not prefer girls as a wife who are more educated, (3) education became necessity for marriage only for girls, (4) girls' education has not created its importance in society.

Identification and Management of 'Typical' Behaviours of Children with Attention Deficit Hyperactivity Disorder (ADHD)

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This study describes the 'typical' behaviours shown by children with Attention Deficit Hyperactivity Disorder (ADHD) and the effectiveness of a specially formulated management programme consisting of cognitive behavioural strategies, operant conditioning techniques and common sense methods by parents and teachers.

In order to study children with ADHD in their natural environment the case study approach was used. The sample was selected from a population of 1920 children from 8 English medium, private schools with school counsellors / special educators. A final sample of 34 children was selected for implementing of parent and teacher scales. 8 children were identified for case study. These children were selected on the basis of exclusive criteria of a medical diagnosis by a paediatric neurologist.

The research tools developed by the investigator were used in the study. These were Rating Scales for parents and teachers, Monitoring Records for parents and teachers, Parent and Teacher interview schedules and Management Programmes to be used by parents and teachers of children with ADHD.

The investigator held orientation sessions for parents and teachers prior to remediation. Systematic observation was used to gather data on behaviours patterns and also on effectiveness of the management plan. Parent and Teacher Monitoring Records helped to substantiate this data.

Analysis of all data was qualitative. The analysis of the total groups (N-34) showed range of behaviours shown by the group and also identified 'typical' behaviours shown by the group. This was done by using a 75% cut-off level i.e. behaviours shown by 75% or more of the subjects were identified as 'typical'.

Individual case studies provided information on the family background and parental concerns and also on school climate and teacher concerns. The effectiveness of the management programme by parents and teachers has been discussed in each case.

An analysis of the total case study sample showed the type of behaviours shown and the effectiveness of cognitive behavioural strategies along with other methods used.

The results of the study indicated a significant level of consistency between parent and teacher ratings and these were also consistent with the investigators observations. 'Typical' behaviours were in the categories of attention, hyperactivity, impulsivity and demanding behaviours. Socially clumsy behaviours and emotional variability were secondary behaviours.

The results also indicated that cognitive strategies combined with modification of environment and change in parental attitude as used in the Management plans helped improve behaviours of all children from well below average to peer average.

The conclusions of the study were that teachers are extremely effective in identifying behaviours of children with ADHD and hence a diagnosis of ADHD must include detailed information from teachers. Parental attitudes and class environment also play an important part in determining the intensity of behaviours shown by the child and many extrinsic behaviours can be changed by modifying these variables.

That cognitive behavioural strategies worked best with older children in the classroom was amply demonstrated in the study. However, when combined with token programmes and some common sense methods they are even more effective. Parents found cognitive strategies effective even with younger children (5 years).

Children with ADHD showed a wide range of behaviours but when dealt with in an appropriate manner, all behaviours showed great improvement.

Impact of Parental Educational Status upon Drop out/Regular Participation Among Slum Children in Kanpur City

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Slums have become an inevitable factor of the urban life. In Kanpur the slums are developed generally in the form of Ahatas. In 1988 the slum population in Kanpur was 2,86,840.

There are various reasons of drop out as poverty, ill health, engagement in work at home or outside home, poor memory, lack of guidance at home and illiteracy of parents. In this study the researcher has tried to evaluate the impact of parental educational status upon drop out/regular attendance behaviour of slum children in Kanpur. For this study 500 drop-outs and 500 regular students have been chosen as sample.

Data on parents education of drop outs and regular children reveals that there is a clear and definite relationship between the level of father's education and drop-out behaviour of the child. Lower the level of education of father, higher is the drop-out rate. It is maximum (53.20%) when compared to illiterate fathers while it is very low (40%) among fathers who possess secondary education. However, it is difficult to conclude about a converse phenomenon, that is, the higher is the regularity in the continuation of children in schooling process. The relationship between father's level of education and regular participation is not clear. While the chances of a child dropping out of school when the father is illiterate is 53.20% the chances go up to 84.80% where mothers are illiterate. On the other hand the chances of a child attending the school regularly even when the father is illiterate is 18.60% while the chances in case of a mother is 78.20%.

More than half drop-outs are engaged in paid work and the rest of the drop-outs are engaged in domestic works.

It is also observed that the level of education of elder children also play a booster effect on the education of younger children.

Mother's educational awareness and interest play positive role in regular attendance.

In 1980, Dr. Karlekar had done a study about slums and asked the question to women that what do they think about the education of girls. The women answered that there was no use of education for girls. But when it is asked now (1996) to the women living in slums of Kanpur, most of the women are aware of the importance of education for their children and they are so enthusiastic for the education of their children that they say that they would send their children to school and make them study till wherever they want but on one condition that they have to work also due to economic condition.

Universalisation of Girls Education : A Pragmatic Eclectic Approach

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This paper provides a pragmatic eclectic model to achieve Universalisation of girls education.

The Independent India has been trying to achieve her Constitutional goal of Universalisation of Elementary Education in many ways and means. We had so many Committees and Commissions, Policies and Programmes & Plans and Pledges to enhance the literacy rate. Even after 50 years of independence, there is a marked gap between precept and practice. Still India has the largest number of illiterates and it is still more higher among women. Indeed, with all our determined efforts, we were able to draw a silver line in the world map, in other fields. Then, why not we attempt to raise the literacy level too? Having this motive, this paper has been written. This article has three parts.

- Part 1 Reviews and assesses the past efforts the growth trend of girls education in India in 50 years of Independence and also its impact on the society.
- Part 2 Examines the loopholes, drawbacks, gaps and Impediments of the previous and present venture of girls' education.
- Part 3 In the concluding part an eclectic model for achieving 100% literacy in the next Millennium has been evolved with specification of the roles, responsibilities and duties of each and every human being and agencies involved in this mission.

Education for Girls and Women

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This paper would encompass the need of education for girls and women as literacy and education are basic human rights that are still too frequently deride to girls child. Urgent priority is to be attached to the education of girls and women. The benefits educating women need to be emphasised. Education is empowerment and women must be empowered to take control of their own life. Education opens the door to opportunity and choice for women. It saves women from prejudices, tabors and superstitions. Unless a systematic effort is made to improve women's access to education, it will not be possible to achieve the objective of Education for All by the year 2000 A.D. because "when you educated a men, an individual gets educate, you educated a women and generations are educated", said Mr. K. Karuna Karan. It would help in population control, lessening child mortality etc. Hence, literacy and education are to be put within the reach of all girls and women.

An Analysis of the Teaching Learning Processes Followed in Ashram Schools of Orissa

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In this paper an attempt has been made to examine teaching learning processes followed in the Ashram Schools located in the Tribal areas of Orissa. This paper is a field based study highlighting some of the teaching learning activities practised in the Ashram Schools. The observations have been made in the context of the availability of teaching learning material and the processes followed in the conduct of classroom activities. This includes identifying the weak learners, tutorials, evaluation of the students etc.,etc. In addition, handling of multiple classes, the inspection practices followed in these schools are also dealt in detail.

Literacy : The Women and Empowerment

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Literacy refers to state of being literate, especially of possessing the skill of reading and writing. However, literacy means literation, empowerment and development and how to make best use of them. About half of our population are illiterate. Most of these illiterates constitute the oppressed section. Among these, women are more oppressed ones. The impact of literacy on women's lives has often been dramatic. Experience of Pudokottai in Tamil Nadu and of Nellore in Andhra Pradesh have shown how women have been empowered at individual and collective levels as a result of their participation.

Through literacy, women become aware of their social and legal rights, they can learn and improve income generating skills, acquire a position in the affairs of the family and community and equal participation in the decision making. We talk of decentralised planning and 33 per cent reservation of women in panchayats. The vision will remain a vision if we do not go about strategically empowering women in that direction.

Higher Education : A Global Challenge for 21st Century

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In the last two centuries the universities all over the world have undergone radical transformations. The universities have become the backbone of the nations of the developed countries. The universities in the developing countries need complete overhauling to cope with the information explosion through multimedia superhighway for global network. Most of the universities in the developing countries have overlooked the importance of economies of education. The university education has expanded tremendously leading to unmanageable levels. No proper infrastructure in the form of knowledge accumulated and skills to be generated have eluded the aspiration of the younger generations. Lack of teachers conversant with present trends of learning has added to generation of unemployable manpower. As a result the universities in the developing countries have measurable performance in creativity and information leading to breakthrough suitable for overall economic development of the developing countries. India claimed to be the second in generating science and technology manpower in the world has not been able to give one Nobel laureate after 1928. The University Grants Commission, the organisation for maintaining standards and releasing grants have not been able to give the leadership for generation of human resources for the 21st century in India.

The author in this paper tries to identify some of the lacunae in higher education in India. A blue print is also presented for actions to be initiated for high quality education for 21st Century.

Educational Standards - Recommendations for Improvement (A Case Study of J&K State)

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The thrust, now in the country, is to make education utility-based. Many efforts in this regard have been made, yet lot is needed to be done. The standards of Education have been witnessing a **dwindling trend. However, the men at the helm of affairs as well the teaching community are trying to effect improvement in the standards of education. It is with this backdrop that a study** has been taken up. The present paper is spread over to six sections and deals with the subject viz., (i) introduction, (ii) causes responsible for the decline in the educational standards, (iii) improvement in the educational standards through (a) Policy of admissions in the higher education right from the college level, (b) Role of academics in improving the standards by developing their professional competencies and concentrating on generation of knowledge besides, its dissemination, (iv) administrative role to make an in-depth study in their functioning vis-a-vis towards the improvement of educational standards, (v) role of the society towards helping the academics and the educational administration in doing away with the unfair practices that have crept in the educational system in order to ensure improvement in the educational standards, (vi) role of the State in incorporate the education on priority list. Lastly the paper gives the conclusions of the present study, and some suggestions. The present paper covers the study of J & K State.

Higher Education : Need for Developing Entrepreneurial Culture in Institutions

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The higher educational institutions have primarily produced job-seekers rather than job-creators because of the type of education - mostly theoretical - imparted to the young graduates with a sprinkling of real life industrial/business problems. The graduates are generally 'uncomfortable' working with their own hands. They are not encouraged to handle tools, repair simple gadgets, house-hold appliances, consumer goods, scooters and motor-cycles, etc. With the result that 'technically' the graduates are weak and lack of confidence. Our curriculum, classroom, laboratory work, training methods, etc. has not been able to remedy the situation much.

The best education system appears to be the medical-education type of 'learn-practice', which prepares the entrepreneurs immediately after the basic University Degree and internship because whatever one learns in classroom is immediately tested, debated, concretised through excellent lab sessions and practical exposure. The first-generation entrepreneurs are worried about cost, quality, technology, logistics, consumer satisfaction, service quality, TQM, Technology Transfer, Technology Management, etc. Some are concerned about business strategies, acquisitions and mergers, alliances and joint ventures, core competencies, downsizing, manpower planning, HRD. Thus, they need to be global in mindset.

Hence, our higher education is now required to change mindset for developing strategies that enable them to produce responsible and competent managers/entrepreneurs/ technocrats to effectively run their enterprises in fast changing economy.

This paper attempts to highlight and suggest some strategies to be adopted in the curriculum and training methods of higher education so that the young graduates after passing the basic degree courses can be motivated to start their own ventures at the same time, provided employment to the others.

Information Technology and Higher Education : The Indian Context

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The rapid developments that have taken place in recent years, in the field of information technology, have paved the way for revolutionary changes in higher education, in terms of both methodologies and concepts. The new technologies have basically provided access to a vast volume of information, helped in handling this information more competently and have consequently assisted in improving both quality and productivity. Evidently if the breakthroughs in information technology are to be fully taken advantage of then there have to be major changes in our policies regarding teaching, research and educational administration. A corollary is that there has to be a revamping of the infrastructure and appropriate changes in procedures and methodologies.

In India personal computers, facsimile (FAX) and electronic mail (E Mail) have become common, educational television and multimedia have been introduced, computerisation of administration and libraries is underway, interactive TV and networking through computer-based electronic message system (CBEMS) are a reality, and the emergence of a multimedia information superhighway (MISH) imminent. It will, therefore, be of interest to briefly review some of these developments i.e. Information Highways, multimedia, digital library and Internet etc.

The danger Indian higher education faces is that of becoming largely irrelevant unless adequate financial resources are immediately made available for introduction of the new technologies.

Contours of Higher Education : An Innovative Perspective

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The paper presents the vision of shaping the contours of higher education. An innovative comprehensive and flexible higher education policy framework emanating from the vision is portrayed through an Interpretive Structural Model which is briefly described. Total quality management in higher education is duly highlighted. In conclusion, the paper points out that in a rapidly changing world, the most efficient planning and management strategies are likely to be soft planning approaches requiring not only the technical capability, but more important, an applied systems way of thinking.

Issues in Higher Agricultural Education

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Agriculture which forms the backbone of Indian economy, is the source of livelihood for over 70 percent of the population, directly or indirectly. Along with its allied occupations, it contributed 59 percent to the total national income in 1950-51, but dropped to 31.6 percent in 1990-91 (Arya, 1994). Even today, this sector contributes approximately 30 percent to the GDP as compared to 2-7 percent in the contemporary developed world (Proda, 1997). Though agriculture has modernised but still there is scope in most parts of the country for its development through the application of science and technology. Even in these areas where maximum progress has been made, the technology has not reached more than 30 percent of the farmers (Singh, 1990). Population pressure, recent developments and trends in national and worldwide policies have changed the entire system. Higher agricultural education and research is facing new challenges and it must focus on synthesizing many of the new and emerging areas of science into action programmes and projects of a pragmatic nature not only to increase production but on optimisation of various inputs to bring out improvements in the quality of life of the farmer, the farm workers, and the general citizen (Randhawa, 1989).

The present paper intends to throw light on the following issues which pose a challenge for higher agricultural education :

- food requirement and optimising productivity in agriculture through proper management of land-dry land or waste land farming, soil reclamation, management of water etc
- maintaining nutritional security for people
- diversification of agriculture and its allied areas as forestry, horticulture, mushroom cultivation, sericulture, fisheries, bee-keeping, rearing of small animals, biotechnology as tissue culture, generic engineering etc.
- ecological stability through scientific soil and water management particularly in the context of their overdose of chemical fertilisers and pesticides
- harnessing technology for non-conventional sources of energy
- evolving technologies for women involved in agriculture
- management of agri-business and self-employment opportunities for rural people, agro-industry linkages; and
- improvement of post-harvest technology to compete for market and export to accept the challenge of privatisation and globalisation.

The Higher Education Finance

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The dangers of privatisation of education was sensed by Dr. Adam Smith way back in 1776. But in the modern days specially in a developing country like India, the resources for financing higher education has been very difficult. The increasing burden that the government has to bear in primary education provides the least scope for increased allocation to higher education. The grants and subsidies have proved to be increasingly burdensome. The preparations for (the establishment and regulation of) the Private Universities Bill, 1995 is in progress due to its introduction in the Rajya Sabha. If the bill is enacted by any chance, it will change drastically the educational scenario in the country. In particular it would favour imperialism and put the teachers, students and the society in quandary.

Against this, the present paper attempts to counter the arguments in favour of privatisation of higher education. Divorced from the argument, it is noted that there is a need for drastic change in the present financing policy of higher education in India. In particular the equitable, efficient and millennium alternative methods are evaluated. More specifically, the attention is focused on (a) the educational vouchers system, (b) the student loans and (c) the graduate tax. The choice has to be made from these, that which suits more to the Indian situation. The paper ends with the emphasis on more deeper empirical investigation of the chosen scheme/programme for financing higher education. For convenience it is divided into five parts. The Part (I) describes the educational allocations. The problems of privatisation are noted in part (II). The suitability of self-sustained, millennium and feasible (administratively) mode of finance is evaluated in part (IV). The summary and conclusion are given in Part (V).

Privatisation of Higher Education

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India enjoys the distinction of having one of the largest educational systems in the world, comprising of 223 University level institutions, over 8500 colleges, 35 deemed to be universities, 33 Agricultural Universities and 5.5 million students. A study conducted by University Grants Commission (UGC) exposed that keeping a student on the campus costs Rs.11,800/- in humanities and social sciences and Rs.21,000/- in sciences.

Wastelands of Higher Education

1. Out of 90 percent students enrolled at undergraduate level not even one quarter of them are interested in the courses for which they are enrolled.
2. Out of 8500 colleges, 40 percent are not eligible for UGC assistance as they do not fulfil conditions required.
3. Only 33 percent marks are required to get a B.A., B.Sc. degree, that is, a student needs to comprehend only one third of the syllabus to pass the examination.

The inadequate funds to keep the system moving further add to its problems. The ratio of contribution of funds during the VII Five Year Plan is given below :

1. State Funds	- 85.3%
2. UGC	- 3.3%
3. Fees	- 11.4%

The State Governments, major agencies of support it are themselves facing financial constraints, consequently universities are recurring huge deficits. Some of them have taken over-drafts of crores of rupees to meet their expenses and are paying interests in crores annually.

Who Gets Benefits from Higher Education

There are only five percent out of the age group 17 onwards who get an opportunity to pursue post secondary education and only one in 400 who manages to get admitted in an Engineering College. In fact not more than 0.5 percent of India's total population is enrolled at higher education level.

Higher education in India is highly subsidised. The students have been paying too little in the form of fees. The reason for keeping the fees low was to help the poor families and to promote equity. What has taken place over the years is monopolising of seats by the well to do classes in the institutions of higher learning. The quantitative explosion in these institutions has not made higher education easier, for the lower income groups. The so called educational boom instead of equalising educational opportunities has in fact legitimised the inequalities over the years. Over one third of India's college, university entrants come from the lot of 30 percent of the society. Those who come from poor families may not be more than ten percent of the total student population. Thus the maximum subsidy goes to the rich.

India with 40 percent of its population below the poverty line and 52 percent literacy rate cannot spend public money on educating students from well to do backgrounds at higher education level. By privatising higher education the government not only can save huge expenditure it now incurs, but also make private funds flow into education. The funds thus saved can be used to expand primary and secondary education. The research has proved that the amount spent to prepare a graduate can provide primary education to 66 children. Besides the contribution of higher education to economic growth is less than primary and secondary education. The country needs to invest in the education and health of children from poor families who start working earlier than going to schools and become weaker and less intelligent and hence less productive.

TQM in Higher and Professional Education

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In one sense the total quality becomes a slogan while the new sense of total quality reaches to mission. Most of the national, multinational and even regional industries know the concept of TQM but there are only a few higher and professional education institutes where the TQM is realised. Day to day problems of an educational institute become multifarious and today identification of problems becomes one more problem itself. To have a better solution, one should know what is meant by TQM and how it can be implemented.

The concept TQM arises from industry culture. An application of TQM to the higher and professional institute means involving the whole institute (every department, every staff, Principal, Management, every student) in achieving of an Excellency.

Since long before the main thrust has been given to training of manpower for the well organised society. But somehow, due to some administrative problems and initial inertia to oppose changes, the quality of higher and professional institutes and their product has not increased up to sufficient height. To achieve this height one has to learn and adopt the TQM.

No educational institute can remain healthy, unless and until people working in an institute work efficiently to improve the quality of their own as well as the group works. Continuous cost reduction and simultaneous improvement in quality of output is the 'quality management'. To improve the quality of operation, everyone has to work for their educational institute to become best one. Continuous improvement in the system always meet the needs and expectations of society. Quality can't be injected into the output while it has to built within the process of making the output. The sum of large number of activities from the management to the student forms the quality i.e. teaching learning process, skills of staff, infrastructure facility for the practical and training, examination and admission procedure, extra curriculum, academic environment, team work, attitude, human touch atmosphere and too many things together.

In our country there are good job potentials in the professional field only if we could organise human resources and their talent. For TQM there is master key - Pick, Place and Promote. Each

one has to pick the problems and place it on the appropriate bench. By placing the problem on an appropriate bench doesn't complete the duty. But one has to promote the problem unless it gets solved.

Evaluating Staff Development Programmes and their Impact on Teachers and Colleges

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In post independence era, Government of India set up good number of committees and Commissions on education, viz University Education Commission (1948-49), Education Commission (1964-66), National Commission of Teachers-II (1985), Mehrotra Committee (1986) and Ramamurti Committee (1990). In 1986/92 National Policy on Education and its Programme of Action (POA) were adopted by the Parliament. All these have laid stress on the need for professional preparation of teachers of higher education at the beginning of their tenure (general orientation) followed by continuing education (refresher course) for updating of knowledge and methodology of teaching. As a response, the scheme of Academic Staff College was launched in 1987 by the University Grants Commission. This scheme envisages a systematic and organised effort of Staff Development through the institution of Academic Staff Colleges. In 1987, the programme started with 41 programmes with 1345 participants and steadily increased to 3182 programmes with 102,955 participants who have availed themselves of such opportunities by the end of March, 1996.

The UGC sponsored in depth field study to ascertain the effectiveness of Staff Development Programmes (i.e. evaluating SDPs) and their impact on teachers and colleges. This paper shares the results of this study. Evaluation of Staff Development Programmes focusses on content, planning and implementation and resource persons. The impact study is based on perceived changes in attitudes and behavioural norms of teachers. It also presents the views of principals and H.O.D.'s regarding the impact of the SDPs in improving the academic environment of colleges and on teachers.

Ancient Education - Foundation Stone of Human Development

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The Indian Rishis and thinkers were analysing the real nature of thing at the time when the culture of other countries was at its initial stage. In the history of human brain Indian spiritual history always had a powerful impact. The system of education developed by ancient philosophers is a great achievement for human beings. Impartial historians have said that India was on the zenith of world culture. But there is a grave problem of illiteracy in this country.

Teacher - Student Relationships

According to Upanishads a teacher is essential for spiritual knowledge. Teachers have been compared to Gods in the vedic era. A teachers life was ideal for the students and the students reached a stage of completion after following their teachers. The students expressed their respects, faith and trust by serving their teachers and considered it as their holy duty. The teacher

student relationship has been analysed in the following way, Parents give birth to the child, which constitutes the physical existence but mental, spiritual and moral development is carried out by the knowledge imparted by the teachers who is also called Manas-Pita.

Teachers

During ancient times education was imparted by such teachers who were intelligent, witty meditative. Students became mentally awakened and dutiful citizens by following their teachers. Shastras classified teachers into four sections namely, Acharya, Pravakta, Shrotriya, Adhyapak. Independent teachers were called "Uggyata". It was expected from the Acharya's that they would practise the qualities before preaching them to the students. The teachers held an honourable position in the society.

Purpose of Education and Students

The ideals of ancient education were as follows - God worshipping and development of spirituality, building of character, development of personality self control, social capability and protection of culture and publicity. In ancient times also educators had introspective foresight, with the help of which they found out the latent talents of child and decided whether the child is suitable for Brahman, Kshatriya, Vaishya and Shudra.

Syllabus and Term

Students were taught the four Vedas, six Vedantas, history puranas, Mimansa (Previous and Post period). Justice, Ayurved, Dhanurved, Gandharve Vada, and Economics. Scientifically speaking the duration of education was 20 years as stated by Dayanand Saraswati in "Satyarth Prakash" in the third chapter.

Education Session

Ancient education began on Poornima day of Shravan month and the session ended in the month of Phalgun called "Chansma Utsarjanam" function. After receiving the education there was a closing ceremony called "Sama Vartan Sanskara" (the literal meaning is going back home after the study of vedas in gurukul). Today man's education has taken him to the moon and Mars but morality, civility, courtesy, manners etiquette are at its decline. Today the gurukul system is badly needed with a blending of modern science. By achieving this the students will become self disciplined morally strong and patriotic, attaining of worthy and wholesome personality.

Teachers for the Twenty First Century : Redefining Professionalism for Global Perspective

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The greatest challenge to education for twenty first century is to rejuvenate itself for the coming generation. Due to rapid expansion and developments taking place in the field of information technology the national boundaries are falling, interdependence among people is growing and

world is shrinking into a global village. Global interdependence has become a reality in ways unparalleled in human experience. Needless to say that these changes are taking in all walks of life including education.

Education has the major responsibility to contribute to development, enhance mutual understanding between people and communities and prepare citizens to understand and face the realities of globalisation. The importance of the role of teacher as an agent of change promoting understanding and tolerance, therefore, has never been more obvious. As Delores Commission suggests "it is likely to become even more critical in the twenty first century. The need for change, from narrow nationalism to universalism, from ethnic and cultural prejudice to tolerance, understanding and pluralism and from autocracy to democracy in its various manifestations places enormous responsibilities on teachers who participate in the moulding of the characters and minds of the new generation".

Teachers in contemporary society, need to possess both high academic standards and moral and practical sophistications. Teacher professionalism, therefore, needs to be redefined keeping in view the demands of high tech global society of twenty first century. The present paper has been conceived and developed against this backdrop.

Of Roots and Wings

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As compared to the teeming millions inhabiting this planet called Earth, it is only a handful of scientists that discover new truths about nature, and again, it is only a handful of technologists that apply these newly obtained truths to design new gadgets and machineries to achieve societal objectives. Though handful in number, these scientists and technologists change, deliberately or unwittingly, the life style of almost the whole of mankind. Science is free objective, neutral and public whereas technology is local, private and expensive. Science (S) leads to Technology (T) and Technology in turn leads to Production (P). It is this STP spiral that builds up a country's industrial base, increases the standard of living and confers political and economic domination and technological imperialism. Exponential growth in the knowledge connected with science and technology and subsequent production of new things in large scale and their distribution all over the world has a tremendous impact on man's attitudes towards diverse facets of his life. At all levels - individual, local, regional and national - some people are neo philia and some others are neo-phobic. Too much of neo philia, i.e. excessive love and attraction for the new, may tend to whole sale rejection of all that is old and traditional whereas too much of neo-phobia, i.e. excessive fear and repulsion for the new may tend to whole sale rejection of all that is new and progressive. Excessive new-philia has a tendency to make people rootless by providing them with tempting wings to fly high in the sky of novelty and progress. Excessive neo-phobia has the opposite tendency to keep people bound to their old traditions by making them impervious to new thoughts and ideas capable of leading to change and progress. In order to be fit for the fast-changing modern world one needs both roots and wings. It is the education system which must take on itself the great responsibility of continually identifying the most essential and relevant components that are necessary for healthy growth and development of children and of blending these components together in the right proportion with a view to ensure that the recipients of

education turn out to be people with deep roots in their own culture and tradition and strong wings to fly high and explore new things for wholesome assimilation with the old.

Teacher Education : An Emerging Field of Research

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Satna

Proper training of teachers is of great importance in improving the quality of education. 'Teacher education' occupies a central position in the total programme of education. This programme is responsible for equipping the teachers with competence and abilities so that they may guide the destiny of the society and nation through proper handling of future citizens. Various commissions and committees appointed by the Central and State Government in recent decades have all emphasised the need for quality of teacher education suited to the needs of the educational system - both formal as well as non-formal.

There are of now as many as 5.9 lakh Primary Schools, 1.7 lakh Elementary Schools and 95 thousand High/Higher Secondary Schools in the country. As against this there are 1221 teacher training institutions for preparing elementary teachers and 633 colleges of education/university departments preparing teachers for secondary and higher secondary schools. A sizeable number of them are untrained or poorly trained. It is estimated that not more than 40 percent of the teachers are provided in-service teacher education in an organised manner. Regarding non-formal education, there is no systematic strategies for preparing effective teachers.

Thus, a teacher is required to acquire adequate knowledge, skills, interests and attitude towards the teaching profession. It can be done through well planned and effective pre-service and in-service training programmes.

Of course, some steps have been taken for improvement in the system of teacher education in recent decades. The National Policy on Education 1986 up-dated in 1992 has emphasised teacher education as a continuous process, it's pre-service and in-service components inseparable. The National Council for Teacher Education (NCTE) has been in existence for the last more than two decades and has taken steps as regards quality improvement in teacher education.

In order to understand the teaching process, to identify effective teaching behaviours in terms of various kinds of pupil outcomes and to design training programmes for their effective mastery by the teacher, considerable amount of well designed empirical research is indispensable. Teacher education is to be viewed as a system of continuous, lately interactive opportunities for bearing, exchange of ideas and views, innovations, and experimentation. For this purpose, continuous research is needed on various relevant and emerging aspects of teacher education to meet the demands of the 21st century.

Various types of studies and researches have been conducted on teachers, teaching, teaching behaviour and different aspects of teacher education in India and have shown revealing and interesting results but majority of the research are undertaken to obtain a degree and hence the focus on its possible utility and relevance gets misplaced.

There is a definite requirement of bringing in research methods and methodologies in appropriate form in teacher education at pre-service and in-service programmes. Research must respond to policy issues, curriculum issues, evaluative procedures and practices, training strategies, classroom practices etc.

There are some important priority areas like curriculum development of teacher's training courses at different levels of pre-service and in-service teacher education, teacher recruitment, teacher induction, policies and structural changes in teacher education, transactional strategies to meet the demands of the 21st century, evaluative procedures of performance, different ways of organising teacher education and research in teacher education.

The areas of teacher preparation for special education of gifted children and children from groups with specific cultural, social and economic needs can no longer be ignored. Surveys and studies also need to be encouraged. These may be exploratory or diagnostic in nature. The new initiatives and innovations need to be encouraged and studied.

Researches, innovations and surveys must become an integral part of the training programmes of teacher training institutions irrespective of the stages for which it prepares its teachers. The trainees need to be familiarised with innovative practices in teacher education.

In short, it can be concluded that teacher education is an important emerging field of research in the context of the National Policy on Education 1986 up-dated in 1992. Research and Development (R and D) have become a prominent feature of the educational scene today.

Educating the Early Childhood Teacher for the 21st Century

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Children of today are the citizens of tomorrow. Knowledge, attitude, prejudices and emotional responses to issues concerning different people all over the world which are imbibed in educational settings by children will affect their outlook and behaviour in future years. As we march towards the 21st century, it is with growing awareness that we are moving towards a world which will be very different from the one we have lived in. With the changing world scenario, appropriate measures must be adopted in a hurry to equip teachers to educate our future citizens to face a society beset with innumerable problems. Thus issues that will confront the teachers in preparing the citizens of the 21st century will be significantly different than those that required attention in the yester years. While mastery over the three 'Rs' was the sole priority of teachers of early childhood education in the recent past, today, with growing conflicts all over the world, several other issues need to be given their due importance, issues of peace and harmony, the increasing gap between the rich and poor nations which is growing larger every year.

Facing the Challenge of the Future: It falls to the educator to make the difficult decisions that will determine the moral direction of the world as we will have it be. While we may feel unequal to the task and may fail in the process, the effort alone is sufficient and will have an impact.

Educating the Teachers of Tomorrow: For educating good citizens of tomorrow, we have to start with early childhood years today. To meet this end, we must first educate teachers as the teacher is undoubtedly the most important individual in the educational enterprises. It is the teacher who will be influencing and guiding the minds of our young children. Several studies have shown that children's development and learning are influenced more by the teacher than by the curriculum, content or educational methodology.

Education for Development: The concept of development has now evolved a new definition - one that challenges the conventional view equating development with higher production, income and resources. Development is liberation - liberation from poverty, hunger, exploitation, oppression and from foreign intervention, whether cultural, political or economic.

Type of Education needed to prepare for the 21st Century: We need to analyse the inadequacies, irrelevancies and flaws of our present educational directions, concerns and pedagogy and at the same time offer creative alternatives for consideration in sharing a new educational paradigm. In order to focus on what education will look like in the 21st century, we need to look at the following issues now :

1. Education needs to issue a 'Liberating Consciousness' so that we can be freed from thoughts, values;
2. Education must not alienate learners from their roots;
3. Education must attune us to diverse processes at work in our planet and teach us the meaning of responsible consumption and caring for the earth;
4. Education is 'Human conversation with life'; and
5. Education must teach a 'New value orientation' to motivate and inspire the new generation in their understanding of and reverence for life.

Educating the Early Childhood Teacher : Issues of peace and conflict inescapably affect in varying ways, our daily life and the consciousness of children in schools, including their hopes, aspirations and dreams. Many young people today feel a sense of hopelessness, powerlessness and even despair about the future. This is not confined to third world countries but is apparent in developed countries also. To avoid gloom and sense of doom, teachers need to be hopeful about the future.

Educating teachers for the 21st century thus calls for a fundamental change in our consciousness views, system - in fact a change in the entire educational network. It also requires that the teacher sees himself not as a prime source of knowledge, but as an organiser of learning and learning experiences. Indeed, educating the early childhood teacher for the coming century is a challenge that lays emphasis on peace, liberation of the human being and a call to revive humanity.

Modes used in Teacher Education and their Impact on Achievement of Teacher Trainees

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Teacher Education has been recognised as an important mean for the social, moral and national development. Various committees and commissions have recommended various reforms in order to make the whole teacher education system effective and beneficial for the society. Since last three decades, it is being discussed among the educationists and policy makers that whether or not teacher education should be given using the methods of distance education. In other words should modes other than regular be used for training teachers and how it would affect the achievement of teacher trainees? There are some of the questions, answers of which was tried to find out in this research paper. The study was conducted on teacher trainees of an institution where both the modes - distance and regular are being used for teacher training. Their achievement was judged on the basis of examination marks obtained by them in the annual final examinations conducted by the university. It was found that in the major theory based (content loaded) papers, regular students achieve better as compared to the students studying through distance mode. As far as the division is concerned, it was found that there were more first divisioners among regular students. Contrary to this, it was observed that students belong to distance mode were comparatively better in their achievement in some of the papers which are less content loaded (practice based). As far as the practice of teaching is concerned, the distance students performed better than their regular counterparts.

Some of the students who belong to both the modes were interviewed in order to know the perceived causes of this difference in the achievement. After analysing their views, it was found that difference between the group's achievement was due to teacher trainer's partial behaviour, time budgeting, improper facilities, and quality of study material etc.

Teacher Education in Assam

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C.T.E., Golaghat

1. Introduction: Assam lags behind in teacher education which is a means to improve general education.
2. Historical perspective: Before independence there was one normal school. Now there are 7 normal schools, 12 DIETs and some BTCs for the education of primary teachers and 19 B.Ed. colleges for secondary teachers.
3. State of General Education and Human Resource Development: There is a decreasing trend in the standard of general education with large scale dropouts leading to colossal wastage of human resource. It is not only educational but a major social problem. Shortage of trained teachers is a main cause of large scale failure in examinations.

4. **Role of the State Government:** Government of Assam seems not to realise the importance of teacher education. The BTCs, DIETs and Normal schools are not functioning regularly. There is no provision of pre-service education in the BTCs and DIETs, only 67 percent lower primary, 29 percent upper primary, 30 percent secondary and 22 percent higher secondary teachers are trained. No steps are taken for clearing the backlog and pre-service training is not insisted on for fresh appointments. Budgetary allocations for teacher education are not fully and properly utilised in time.
5. **Role of the Universities:** Universities of Assam have not shown a proper understanding of the problem of teacher education. They are indifferent to the real situation and put much restrictions in admission to the B.Ed. and M.Ed. courses. There is lack of co-ordination between the Government organs and the universities. New courses are introduced, but teacher education is not enriched to deal with them.
6. **Teachers:** Methodology learnt in the institutions of teacher education are sparingly practised in the class room teaching. The teacher's main concern is to obtain a certificate or a degree. They lack dedication and professional competence.
7. **Conclusion:** In order to bring improvement in education and general development of the state the teacher education system needs overhauling and re-vitalisation.

Education University

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The fiftieth year of independence of India is the year of assessment of the development/gain during these fifty years. The progress in education is as considerable as in other fields of progress of nation, yet it is not as it was expected. To have the expected result from the education and for the all round development of the nation, the co-ordination and well-planned education system is necessary in India. As there are universities like Agriculture University, Ayurvedic University, Technological University, there should be Education University in every State. The development of educational cadres and training of teachers will be the purview of Education University.

A Human Touch in Teacher Educational System Development

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In this paper a need of human touch is emphasised in educational management of teacher education institutions to achieve the national goal of Education For All. The paper has highlighted the research findings of different studies conducted during last twenty years. The efficacy of current methods of teaching were empirically studied. The findings confirmed that the rapproachment method of teaching (a harmonious blend of Objective method of teaching and Piagetian method of teaching) may be more suitable to Indian diverse culture at the primary

stage. The primary school teachers are supposed to be prepared accordingly. It was felt that teacher education institutions are not able to maintain total quality management in preparing teachers in this direction. The literature on management revealed that management of any organisation is a highly specialised area, but it is totally neglected in educational government sector. The important component is human resource development climate which is affecting total quality products. In teacher education the product is a trained teacher whose quality is to be ensured by teacher educators. During the process of teacher preparation the latest methods of teaching-learning are supposed to be developed. The sufficient practice and drill is to be given in the acquisition of required skills of teaching as an art and science, which is not happening. An attempt was made to have an audit survey of the Human Resource Development Climate of Elementary Teacher Educational Institutions i.e. 16 DIETs of five northern states. The HRD climate is characterised by human touch of joy, care, trust, reward, team-spirit, collaboration, feedback and so on among the staff. The relationship among all members is supposed to be very cordial and not hierarchical. There is a need of vision for the institutional mission. The qualitative and quantitative data revealed that the HRD climate of most of these 16 institutions were not so conducive for total quality management. A survey of the process of preparing teachers during teaching practice programme was conducted through personal visits, informal interactions, group discussions, interviews and observation schedules. It revealed a great variation in the number of teaching practice phases in different institutions, variation in the duration of various phases, variation in the number of instructional lessons to be delivered by a student teacher in various subjects, variation in the peer group observation schedule and its weightage, absence of instructional plan in MLL, child-centred teaching methods, predominance of Harbartian Method of teaching at the elementary level, lack of written comments on the instructional plans by teacher educators, variation in the format of the lesson plans in different institutions, not commensuration of training methodology with the guidelines of the DIET, training of methodology through lectures, insufficient staff strength for monitoring practice teaching, absence of academic leadership and non-conducive HRD climate. It is strongly felt that to achieve UEE the image of teacher education be built by proper managerial skills of academic leaders, who can inspire the academic faculty by radiating love and commanding respect.

Creative Perception and Intelligence among Malaysian Teacher Trainees

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As we move towards the next millennium, there is an increasing need for a creative citizenry to help resolve the new and challenging problems. Hence, it is vital for schools and institutions of higher learning to foster creativity. Teachers' level of creativity is one of the factors that determine the level of creativity fostered in the classroom. Research has shown that the level of creativity is dependent on the level of intelligence. To what extent is creative behaviour related to teacher's intelligent behaviour which is vital in the teaching and learning process in the classroom? This paper hopes to provide some empirical evidence on the nature of the relationship between two dimensions of creative perception as measured by Khatena Torrance Creative Perception Inventory and intelligence, as measured by Cattell Culture Fair Intelligence Test, among Malaysian teacher trainees. These findings may help curriculum planners and administrators in designing courses for teacher trainees and students.

Role of Computers in Higher Education

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Revolutionary changes in computer science have not only turned our attention towards them but also have an important impact on our daily life and on our living standard. Computers have unlimited applications ranging from simple word processing to complicated and sophisticated controlling in a satellite launch vehicles. Education is also not untouched by computers. Computers are widely used in the educational institutions in admission work, teaching, preparing results, communication, library, entertainment (playing games) etc.

In conventional computer aided instruction (CAI) applications, "canned" sequences of instructional material are presented; interaction with the program helps the students to learn. Unlike traditional CAI, Artificial Intelligence based Computer Aided Instructions (AICAI) can adjust its tutorials to the student's knowledge, experience, strengths and weaknesses. Intelligent CAI is far more effective than conventional CAI, as a result. In addition, students can learn from expert systems. The knowledge in an expert system can be tapped by assuming problems and finding solutions. There are a number of advantages of AICAI in teaching :

1. Teaching can be made interactive
2. Computer based education can offer choice of colours, graphics, zooming etc. so as to improve the teaching effectiveness.
3. Teaching can be made motivating
4. Tutorials can be given according to the student's capabilities
5. Computers can be made intelligent using fuzzy logic, artificial neural networks, and expert systems
6. Computer's knowledge can be modified and/or updated
7. The multi-media facility in computers increases the teaching powers tremendously
8. Logical explanations can be given by computers if it is intelligent.

This paper deals with the applications of computers as an educational tool for quick and effective learning. Unlike the conventional teaching, the students of all varieties can learn according to their capabilities with the help of Intelligent computers. Students can also spend sufficient time to understand the problems without much problem. The paper illustrates models developed on computers to teach in higher and professional education. In the professional education where automatic manufacturing and adaptive controlling is difficult to teach, computers can make it easy by developing educational software modules.

Management of Education in India : History, Prospects and Emerging Issues

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Management Education being organised science in 20th Century, University of Pennsylvania started in 1881 America's first school of finance and communication. In India the first school to offer management education, was Indian Institute of Social Welfare and Business Management established in 1954. IIMs were set up by the Government in partnership with Industry and Ford Foundation, later. Today in India there are more than 500 management schools producing more than 15,000 MBAs.

Research and teaching methodology is the main structure of management education system. Indian management education system requires close association with industries since mutual benefits for business, industries and institute have to be properly brought forward.

Challenges of Management Education in India : A Study of Students' Perception and Expectation

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The Indian economy has undergone a radical transformation. The changes have been taking place in all spheres of our existence. The winds of change have begun to blow in the Indian management schools too. Management education on one hand is facing the challenge of increasing competition and on the other hand is ridden with internal squabbles of mismanagement. Through maintaining quality it can overcome these problems and achieve productivity. There is tremendous scope for management schools to change innovatively to include as many areas as possible for introducing constructive change in systems and procedures to meet the new competitive circumstances of tomorrow. In this paper, an attempt has been made to examine the perception and expectations of the students of management schools with regard to curriculum, teaching method, examination system, support services and career prospects and also to suggest some measures to improve the performance of the business schools to achieve excellence.

Repositioning of Management Education

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In the absence of an effective primary and secondary education system in India, management institutes should take up the responsibility of inculcating management culture in the society. This paper highlights the role of management education as an instrument of ensuring long term survival and growth of not just a privileged few individuals and organisations but of the whole

society. This paper also emphasises the need to reposition management education as education for masses rather than for classes. The paper suggest a four tier model of management education in the country as follows :

1. Compulsory Management Education (CME) right from the school/junior college level so that skills, attitudes and value development begins at the right age. Some of the concepts/topics which can be introduced are optimality (maximising gains and minimising losses), strategic thinking (sacrificing such short term gains, which may affect chances of long term survival and growth), Customer Orientation, Pursuit of Quality, Time Management, Stress Management, Personal Financial Management, Career Selection and Planning, Social Responsibility and Ethics etc.
2. Diploma in Management (DIM) in which micro level functional specialisations can be introduced so that students can take up entry level jobs in the organisations.
3. Advanced Diploma in Management (ADIM) in which macro level functional specialisations can be offered.
4. Master of Management Studies (MMS) to be offered to only those who are supposed to head the organisation or any of its unit.

Relevance of Values in Management Curriculum with Special Reference to Marketing Management

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The ethical behaviour of a manager within an organisation creates positive impressions in all business channels and outside to create goodwill for the organisation. The ethical behaviour is a direct result of values and moral principles inherited from the education received. Change in the society continuously reshapes the ideology and motivates the people to adopt better ways of living, thus increasing the expectations from products and companies manufacturing them. Since marketing is not the function of a marketing manager only, the role of a modern manager is to be sensitive to both, internal as well as external customers of the organisation.

The present education system should impart values to the managers, so as to sustain them in all circumstances. The present study has been carried out to identify the most vital values, while imparting the education in marketing management.

Globalisation and Computer Education : A Critique

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In view of globalisation of India in terms of information technology, service industry has created new needs for improvements in computer education. Computer education at technical degree level started in India around 1980; since then it has taken several turns. This has been a discipline which never stayed stable due to frequent innovations, modernisation and now due to globalisation.

This paper highlights the changing trend of computer education which took place in last decade and presents a new model for upcoming global era. The model refers to modifications needed at masters level curricula and teaching methods. This is an interdisciplinary model emphasising on 'Applied Computing' over 'Abstract Computing'. Significance of merging the values and ethics, management systems, international business and psychology is discussed in the model. Future specialisations are also proposed.

The model illustrates the importance of flexible, optional and vocational curricula. Alongwith this it includes issues of modernising laboratories with technologies like OOPs, ODBC, simulation of parallel computers, distributed data-bases and scientific data visualisation.

Education in Private Sector Management : An Indian Experience

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Management Education has come to stay. Liberalisation and globalization have paved way to expand management education in the country. The number of institutions, student intake, faculty requirements, infrastructural need, financial resource mobilisation, quality maintenance, credibility of institutions, survival and inter-institutional tough competition etc. is to be looked into, if management education in this country would have to create an impact on Indian society.

Management Education has a key role to play in changing business scenario. As education is a means of change, to be effective, it must change mindset and instil and inculcate new ideas of independence and entrepreneurship add, ability to cope up with the changes and meet the global challenge.

The new frontiers of science and technology all over the world, more specially in India, have opened up a great challenge to Indian management education. Hence, there is a need to understand higher education in traditional universities and industry linked management institutions. The private sector management institutions have come up to take up this challenge, more specifically the institutions supported by industrial groups like, Usha Group, Modi Group, Kirloskar Group, Amity Group, Pai Industries Group, etc.

The main actors in the management of these institutions are students, faculty and employers. Everybody seem to use placement as a best way of judging the quality of an institution. Main interaction among themselves and with the society has got a greater impact. Therefore, they are all inter-dependent and have got greater role to play in building management institutions.

The objective of the present paper is to examine various Indian cases. How these institutions have been created? What are the infrastructural facilities created? How do they draw the faculty? What courses and contents they have? What is the placement myth? What management problems they have? What are their future plans? Suggestions are made to improve their performance, quality, placement, interface with industry, etc., to compete with international business schools and impart Indian management education in 21st Century.

Management Education in New Paradigms

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Humanity is on the verge of a possible global renaissance in the 21st century and competent management at all levels of human affairs have an important contribution to make such a renaissance a reality, we have a great opportunity to build up the manhood, the womanhood of this great country.

The basic problem relates to how we manage our people efficiently in this historic paradigm shifts of the Indian and global economic and business environment. Management education paradigm need a review in this context. These new challenges - domestic, economic liberalisation, and globalisation also call for a new perspective on social issues. The core management education needs should be based on Dharma (Righteousness), Lok Sangraha (public good, Kausalam (Efficacy), Vividhata (Innovation), Jigvasa (Learning). We can derive the core educational needs to serve our value system as well as to fight against the truncated humanity. Major areas which need emphasise are competitiveness of Indian industry, growth oriented approach, globalization, diversification, innovation, exports, Indian MNCs, social responsibility, non-profit sector, government sector. Indian management education also needs a review in the context of integrating it to our ethos and value system.

MBA Education in Search of New Identity

Management education and research prepares managers for success in a rapidly evolving and highly competitive global climate where continuous innovation is crucial to productivity and growth in all aspects of industry. The MBA programme embodies a distinctive set of qualities and values which include a small programme based upon collegiality and team work, an international focus and a diversity of cultures and interests.

In MBA programme an innovative and integrative curriculum provides a strong foundation to management, encourages the interplay of ideas and their practical application, and allow students to design an individualised educational programme exposing them to leading edge research and practices. In this fast changing environment especially in the business management education

need a review. In the management education curriculum, a revamping is required to meet emerging environment; the new curriculum should have a dynamic bend of the best contemporary and intellectual management techniques, on the one hand, and the deep, meaningful and time tested cultural values of Indian philosophy.

Restructuring the Higher Management Education for 21st Century

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There is an increasing realisation all the world over that only through the right type of education, human beings can be made good citizens and a better order of society be built. It is also common knowledge that real and effective education must be based on the actual environment and experience and it must equip the student for the type of work, he/she is expected to do in life. Education is not an end in itself, it is only a means to an end. It should aim at producing complete human beings.

Before industrialisation, education was the privilege of the upper class. Today professional education has given a new dignity and status to the labour class and lower class. New technical education is looked upon as important and dignified as liberal education. The old myth that mental work is superior to physical work has been exploded. Professional education makes a person capable of diving deep into the realities of life and presents before him a true picture of life.

Management education is blooming fad which has gripped the Indian education mainstream. Management education aims at enhancing professional practice along with advancing technologies and contribute to the creation, application and extension of knowledge for the benefit of the society.

Higher education is the main instrument for development and transformation. We cannot build a sustainable and prosperous India without human resource development which depends on the health and vitality of higher education. Our education system and policy should be effective in achieving and making a strong and developed India.

The objective of the paper will focus on pressing problems of higher management education and redefining the purposes of higher education. This paper will make an attempt to restructure the process of management education in the present context of globalization and liberalisation.

Management Education in India - A Perspective

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Management Education as a deliberate professional choice came to the forefront in Indian business scenario in sixties through the onset of management institutions like Jamnalal Bajaj Institute of Management Studies (JBIMS), and Indian Institute of Management (Ahmedabad and

Calcutta) etc. However things in 60's and now are different. In the 60's management education had made, but, a small dent into the socio-economic system of our country. In the 60's, the environment was restricted and the Government policy was geared to operate in a sheltered controlled mixed economy.

Today management education has come to acquire the status of the most coveted post-graduate education degree, in India. This is a field into which people from backgrounds as diverse as Arts, Commerce, Engineering and Science vie with each other to make their entry.

Management Education played an important part in contributing to the process of professionalisation of Indian Business and Industry through consultancy, research and training programmes (not to mention providing 'a ready professional manager').

It is in this context, that one lays down some musings on the projected image of management education and the kind of things that may have to be done in order to uphold the management education related activities.

The objectives of the study are :

1. Analyse the present Management Education Perspectives.
2. Understand the perceptions of industry about the Indian Management Education and management graduates and effect a match between the two.
3. Characterise the Management Education in terms of Mckinsey 7s model and suggest suitable restructuring strategies.

Methodology/Analysis/Findings :

It is an empirical study using primary data collection methodology based on questionnaires, interviews, interaction sessions and also secondary sources. The sample consists of management educationists, professional managers including CEO's and management students.

The data are analysed both qualitatively and quantitatively. The findings are used to evolve perspective of management education in the emerging era and suitable strategies for furthering the cause of management education in India.

Management Education in India : What is the Destination ?

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The Dilemma

Looking at the number of management institutions in India, over 500 of them, increasing every year, one could easily assume that India is in the threshold of a management revolution. But the realities are shocking.

The four Indian Institutes of Management get the cream of the young people and produce management graduates acceptable to the corporate sector. The IIMs have the infrastructural facilities, resources and adequate faculty support. But the mental make-up and aptitude of these graduates often contradict with the organisational culture of the employing organisations.

Other management institutes of the universities and the self-financing private ones suffer from numerous deficiencies. Absence of qualified faculty, facilities, non-standard curriculum, teaching aids, library and directional aberration are some of these. The graduates from these Institutions, by and large, are left in the lurch. Employers hesitate to accept them.

The Cause

The AICTE, though, was set up to control and guide the performance, quality and credibility of the Institutions, is not able to do so. The objective of the AICTE has gone astray.

The Evils

With the approval of the AICTE, many management institutions have come up, just to make money.

- a) They do engage qualified faculty as required by the AICTE; they are willing to pay only monkey nuts, so they get less qualified staff.
- b) Do not have a clear perspective of the end-results of their efforts. Or, they are just not bothered about it. They, therefore, have no admission procedure. They admit anyone, so long as they pay the exorbitant fees and the donation, in some cases (not disclosed).

Management Education in India : Challenges and Strategies for the Next Millennium

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Institutions and Organisations based on the foundations of conventional assumptions are bound to collapse in the next millennium. Only those systems and the organisations will survive which are capable of redefining their purpose reorienting their collective mindset to match the realities of the changing times.

Management Education in India cannot be an exception to this universal rule. Those who are concerned over the mushrooming growth in the number of Business Schools in the last couple of years need not have to worry. The first few years of next century will see the decline and fall of many of the standard ones - they will be the victims of inertia. Only those Business Schools which justify their relevance in radically altered socio-economic and techno-political realms will not only survive but will flourish by virtue of their paradigm shift in approach and an alternative perspective adopted.

This paper aims at stimulating thinking the direction of ascertaining new challenges and identifying new strategies for maintaining the relevance of management education of future.

In this context asking right set of questions is of more critical significance rather than seeking right answers to wrong questions. The Paper identifies these critical questions and tries to answer them.

The paper suggests alternative model for Design and Delivery of Management Education programme based on Holistic Perspective and Futuristic Orientation.

Management Education : Promise and Performance

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The central theme of this paper is that most organisations in India -- public and private, business and non-business - are characterised more by the features of a bureaucratic administrative model than by those of a managerial-professional model. Given the promise of modern management concepts and techniques for enhancing organisational effectiveness, it is important to understand the essential components of the predominant model as they manifest in India organisations generally, and in the government and public sectors particularly, and how they often impede the achievement of organisational goals.

The two models are compared on six major value-orientations. The nature and sources of management as a body of knowledge, and its evolution and growth in the context of business and industry, are examined in order to appreciate its promise. The factors associated with the increasing application of this knowledge to non-business sectors, including education, are analysed for the same reason.

Since tradition and culture play an important part in shaping organisational life, the validity and relevance of modern management concepts and theories, developed essentially in the west, to Indian conditions is often questioned. This issue is discussed in some detail and selected recent initiative to bring an "indigenous perspective" to management thought and practice are briefly reviewed.

Finally, the current obsession with management training programmes is examined in terms of their basic assumptions and the almost "built-in" obstacles to their effectiveness.

The Role of Humanities in the Engineering Education in the Next Millennium

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The National Science and Technology and Education Policies lay great stress on science, technology and education in general and technical and management education in particular, as the principal instruments of change for achieving an all round development and integration of Indian economy in the global perspective. It is under these assumptions that the authors have made analytical projections for the next millennium.

Right from redefining the objectives of engineering education in India vis-a-vis the constantly changing circumstances, which cannot be done without the consolidation of the existing success in this direction, our effort covers suggestions right from improving teachers and their teaching, classroom environments, internal and external assessment, university environments, organisations like UGC's etc. financial and manpower position etc.

The authors have keenly examined the various existing weaknesses and possible future weaknesses, the short comings in the private engineering colleges. In the end the authors have also identified distance learning programme and continuing technical education as a major thrust area, we have laid stress on redefining career objectives and academic courses from the futuristic point of view.

Fostering Entrepreneurial Education at Grassroot Levels : Perspective and Future in 21st Century

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Entrepreneurial education is a subject that has assumed great importance and is bound to be one of the dominant topics of discussion during the next century to come. It's role in economic development, dispersal of economic activities, development of backward and tribal areas, creation of employment opportunities, improvement in the standard of living of the weaker sections of the society and involvement of all sections of the society in the process of growth etc. has now well been recognised. But to create a conducive atmosphere to nurture and propagate the concept is not all that easy. The remedy lies in fostering a compulsory entrepreneurial education right from grassroot levels for all.

Against this background, the present paper aimed at identifying the efforts for developing entrepreneurial education in India. It also examines the entrepreneurial education in terms of its methodology, content and duration. There is a need to bring about some standardisation in the methodology and content to evolve a pragmatic and systematic approach to entrepreneurial

education at schools, college levels besides in universities, IITs, IIMs, Engineering Colleges, Polytechnics, Industrial Training Schools etc. Accordingly, a model for developing entrepreneurial education at grassroots level has been suggested. Further, the study identifies such problems which inhibit the growth of entrepreneurial education at the grassroots level and measures have been outlined to propagate the concept for making a NEW INDIA towards new vision and better productivity.

Sustainable Human Development through Technical Education

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The trend towards regional economic communities competing in a global market will put pressure on all countries to redesign their education and training systems in order to produce a world-class adaptive workforce for the next millennium.

It also indicates the need for the identification of future market opportunities aligned to planning and policies of industrial development to take advantage of new potential market.

In this context, for developing countries like India, the importance of well educated and technical trained workforce, at all levels, is seen to be an important factor in providing the necessary inputs to enable nation to advance and develop global competitive edge and sustain the same.

The paper will address to new initiative required in technical education and training to meet the above challenges.

Technical Education in India: Some Issues and Suggestions

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Globalisation, privatisation and open economy have thrown up challenges to all fields of activity including Technical Education. Fierce competition with the international competitors in open market demands for quality everywhere and compels us to go for quality. Quality in user system is function of the quality in Technical education.

Thus there is considerable need for improvement in the quality of technical education that is being offered in the majority of the cases. Therefore, the challenges before us to take new initiative on the following issues : Autonomy to institute, Intensive Industry - Institute Interaction, Quality Education, Skill base curriculum development, Modernisation in the existing higher education institution, Cost-effective Education, Private initiatives, Maintenance of

Quality and standards, Integrated approach in Technical Education system, Feedback Mechanism, Teacher training, Resources Utilisation, Enriching Teaching, Use of Teaching methodologies and Learning Resources, Need Assessment Mechanism, and Examination Reforms.

The paper describes the issues related to quality in technical education as demanded by the user system and suggest some practical aspect to solve these issues.

Technical Education in India Since Independence

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History and tradition has great influence on the characteristics of any system of Education. What we see as the Technical Education in India has its origin in the long past. At one time, India was rated high for superior quality of its science and technology. Mohenjo-daru, for instance provided a very good example of knowledge of town planning, civil engineering and Architecture. Even Rigveda spoke about canals and dams. When Alexander the Great invaded this country, among the things he took away were steel ingots, suggesting an era when India produced steel of fine quality. India reached great heights in metallurgy quite early in her history. But unfortunately no marks of formal technical education are left in pages of history.

We trace the first description of formal technical education in India in the middle of 19th century. With passing years the technical education system has acquired distinct characteristics and has come of age.

The quantitative development in technical education since independence is from 38 technical institution with 2940 intakes to the 2465 technical institution with 3,33,790 intake in 1995.

In the years that followed some significant efforts were made for the development of technical education. Technical education have been recognised as the most significant component of human resource development spectrum with a great potential for adding value to produce and services for contributing to the national economy and for improving the quality of the people.

The paper deals with the number of initiatives taken for the quantitative and qualitative development of technical education.

With the changing Technical Manpower needs of the country, the organization and pattern of Technical education system has changed from different phase and today we have four tier system.

Apart from this, to call on the changing demand of user system and for quick response to the environment, autonomy is awarded to a few institutions in our country.

The pattern is changed from conventional diploma/degree to the establishment of institutes based on modular approach. These institutes were a first experiment in providing a system of technical

education which treats the totality of technical education as a continuum and thus provides for vertical mobility and career growth for all levels of technical manpower.

The paper presents in brief, the attempts made for quantitative and qualitative development of technical education in India since independence and focus on the recommendations made by various committees/commission and the journey of technical education since independence.

Cost of Engineering Education - A Case Study

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Statement of the Problem

Therefore this paper makes an attempt to study the problem of estimation of cost of engineering education and the amount of fees to be recovered from the students. The major objectives of the study are : (i) to estimate the amount of money required to establish an Engineering College with reasonable facilities as per the AICTE norms, (ii) to estimate the total actual cost of establishing an Engineering College, (iii) to estimate the actual cost to be borne by the students of engineering education, and (iv) to find out the extent of Government subsidisation of engineering education and the proportion of tuition fee borne by the individuals in relation to family income.

This research intends to take a case study of a Government funded Engineering Institution located in Pondicherry to study various cost aspects of engineering education.

There are two important aspects of cost analysis in education. First relates to definition and measurement of various types of costs, and second may be about the educational cost function i.e. variation of cost with the level of output. This study analysis is the first aspect only.

As on date, there is no specific study by the researchers on estimation of cost of establishing an Engineering College and per student cost of engineering education. Therefore this study attempts to collect data on the amount of money to be spent on establishing the Government funded Engineering College and the amount of tuition fee recovered from the students. The Engineering College taken up for study is a 12 year old institution established on the norms of AICTE. The data for the last ten years of the College will form the basis of analysis.

For the analysis of cost, the cost may be classified into : total institution cost, fixed cost, variable cost, and per student cost.

Further this study makes an attempt to relate the annual cost to be borne by students with the actual family income of the students, to find out the capacity to bear the cost by the parents.

Needed - Restructuring in Engineering Education

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The paper presents, in brief, the need and importance of integrating engineering education, research and industry in the context of high velocity technological change and external pressure of globalization. It brings out inadequacies in the present system and suggests reforms for institution building so as to make Indian industry competitive.

The traditional organisation structures, systems and procedures for engineering education, research and industry, and because of isolation from each other, have become dysfunctional and hence nonviable. It emphasises that the industry institute collaboration is now very crucial to national competitiveness.

The paper suggests that "Technical Universities" on the lines of agriculture universities be set up forthwith, so as to carry out education, research and technology transfer in an integrated manner. It cautions that without such a restructuring, Indian economy, in spite of potential may lag behind.

Michael Porter in his book, "Competitive Advantage of Nations" has observed from study of ten countries that the technical university is a superior model than normal university in respect of technical education and technological research. Those nations which have more technical universities are more advanced industrially. In the light of above the paper argues for restructuring of technical universities in India.

Role of Professional Education in Overall Development of the Personality of Students

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The changing business environment of globalisation and production and distribution, innovations in communication and information technologies, changing patterns of labour force and the emerging role of multinational corporations, there is need to equip the human beings with such knowledge and skills that they are able to function normally by overcoming all the changes emanating from the said impending environments. To equip managers with the knowledge and skills to manage people with diverse socio-cultural backgrounds and to devise the work culture and the system of functioning commensurate with the globalisation of production and distribution, a pattern of education and training is essential which will lead to the overall development of trainees to enable them to handle these challenges well.

Unfortunately, our educational system tests the ignorance rather than the knowledge and competence possessed by the candidate. These energies need to be tapped for holistic development and optimum utilisation of the potential to achieve larger societal objectives. However, our educational system leads to lop-sided development of personalities, without any

humane flavour, who fail miserably in managing men and resources. Such personalities fail to answer two critical queries: (i) what do I expect from society in the light of my potentialities; and (ii) what do I owe to society in the light of privileges I enjoy as member of the society? Consequently, their learning suffers, motivation deteriorates and perception becomes sick.

Education and training is suffering from a number of deficiencies; it is clear from the socio-political scenario prevalent in our country. The increasing rate of crimes, corruption, injustice, agitation, unemployment and general social unrest clearly reflect the weakness of our educational system. It also provides no future to fulfil the needs and aspirations of young graduates, thus forcing them either to go out of the country or indulge in unsocial activities. Moreover, the system has failed to enlighten, enrich and infuse ethical orientation; thus not leading to holistic development. The pseudo educated elite portray indecisiveness and lack of determination and are generally found to be unclear about their duties and responsibilities towards various sections of society at large.

Thus in absence of a system that believes and works towards better understanding of needs, aspirations and potentialities of students, the objective of producing mature, balanced and developed personalities seems unachievable. This requires a serious deliberation in terms of curriculum design, teacher training and perhaps restructuring authority relationships and making every participant feel responsible for value added returns.

An Educational System to Promote Dynamic Industrial Climate

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One of the indisputable facts about industrial productivity in the country is that it is one of the lowest even if one considers the developing world. Industrial productivity is the key factor influencing cost, quality and delivery schedule which are the determining factors for the survival in a highly competitive global market.

There has been a number of comparative studies of the productivity in various industrial sectors in India and other developed and developing countries. A very disturbing factor is that the competitive advantage that we can derive from our low labour cost is offset due to the low productivity in the Indian industry.

The technical education system has a very decisive role to play in this regard. The key factor in increasing productivity is the capacity for innovation and continuous improvement. The present technological education that is imparted in the country does not address to the issue of inculcating in the graduates and technicians the capability to be analytically oriented having at the same time a sound understanding of the practical aspects of technology. This has resulted in our engineers and technologists lack of capability of looking at the futuristic technologies and developing and implementing them in the country. An alarming fact is that though there has been several occasions when technology was imported, our technologists and engineers have failed to absorb this technology and disseminate the technology horizontally and encourage vertical dissemination by carrying out R & D.

There is considerable difference in the achievement levels in the educational systems in India and countries where industrial dynamism is very pronounced. The educational program in the undergraduate level therefore has to be such that the engineers and technologists should be a motivated and innovative lot with analytical skills. The educational pattern is to be developed with adequate competitive spirit, self reliance, innovativeness for which the conventional educational system has to be totally revamped. A model curriculum is also part of the paper. The focal areas of the scheme proposed are also identified. How the system will address to the ills is also highlighted.

Total Quality Management in Technical Education

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Total Quality Management is a modern management philosophy widely accepted through out the world and is mostly applied to profit-centred commercial organisations. TQM has not only proven to be a panacea to many organisational ills but also is now widely used as a yardstick for quality assurance about a product or service rendered by the organisation to the customers, with its quality norms like ISO 9000 series. Technical education system though not a profit-centred system has tremendous implications for the society, as its products, the students and the multifarious services rendered to society have immense contribution, both qualitatively and quantitatively. TQM philosophy and its various features can be applied to technical education system to give it a quality boost as our technical education system suffers from a lot of ailments due to a number of reasons, inspite of its worth to our society and economy. TQM has been successfully employed in a few cases of technical education system and is being increasingly accepted.

This paper deals with the features of TQM and its feasibility of implementation in education systems in general and technical education system in particular. With opened up economy and liberalisation, there is a parallel thrust on professionalism and quality performance in the spheres including educational systems. With proven success in industries and commercial organisations, TQM can draw parallel lines of success, as proven in some cases.

Flexo-Modular System : Integrated Approach in Technical Education

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Raghunath A. Kulkarni

Ajit, R. Thete

The changing market needs about the products of Technical Education system are diversifying day-by-day. The labour market expects technically skill products (i.e. passouts) from the technical institute. The needs of industry and society regarding trained and skilled manpower are becoming widely diversified and multidisciplinary.

In this context, presently the Vocational Education, Technician Education and Technical Education are being imparted to the students in isolation. The only relationship in these three streams is the rare and remote possibility of vertical mobility from one to the other, especially from Technician Education and Technical Education.

In almost all the institutes, centrally designed rigid pattern of curriculum is implemented and its revision is done at long intervals and also as a very slow process which are hurdles in meeting the diversified needs of the users. Segmenting total technical education in different levels such as M.C.V.C., I.T.I., DIPLOMA, DEGREE etc. had relevance to some extent but when effectiveness of imparting education is to be considered then provision of studies of different levels under the same roof and integrating the levels with approach of flexibility will prove more effective. Such integrative approach in vocational, technical education along with flexible curriculum with multipoint entry and credit system, will ultimately lead to modular system.

The special features of FLEXO-MODULAR SYSTEM will be autonomy, integrating levels i.e. inbuilt continuity in Vocational, Technical, Technology Education and industry occupation, promoting Entrepreneurship through suitable modules, provide modules such that programs become terminating to suit the need of industry and/or suits vertical mobility to higher level programmes, accommodate need for emerging areas and continuing education, technology park, H.R.D., residential type institute, integrated approach in technical education, and provision up to Ph.D. education.

Such technical institute treats the totality of technical education as continuum.

A Hybrid Model of Technical Education in India for the Next Century

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This paper deals with the growth in the field of engineering and technology. The voyage of technical education from the past to the present has changed the view point of civilisation in a significant manner. The existing models of technical education in our country are critically reviewed in the light of exponential development in the field of science and technology, and its impact on the socio-political fabric of the society. A careful consideration of the needs arising out of our dynamic interaction with the fragile environment leads to an advanced pattern of technical education for the next century. The proposed model is not only energy conscious, environment friendly and responsive to socio-economic needs of the local as well as global arena, but also addresses the need and ability to deal with the spirit of aesthetics, morality and social ethics, bound to come up with the advancement of sciences like genetic engineering, bio-technology, nuclear engineering etc.

A Public Limited Engineering College

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With the opening up of the economy India has become a major focus of global attention. Not only the 950 million persons strong market for consumer goods, but also more than 60 million Indian students of higher education have attracted the foreign universities from U.S.A., U.K., Australia, Canada etc. This has created the tremendous business opportunities for international higher education and training institution. Naturally in this line technical education will be first.

The present paper is a first step towards the thinking that quality education can be made available on a financially viable model which can be beneficial to all those who are concerned. Since this model is rather idealistic, suggestions, comments and constructive criticism are invited from the learned faculty as well as management consultants to make the present model more realistic.

Importance of Multimedia in Engineering and Technology Education

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The capacity of Multimedia to integrate text, drawings, full vector graphics and full motion video films and almost infinite potential in its usefulness for education, in general and for engineering and technology education, in particular. The aim of this paper is to discuss various aspects and strategies of use of multimedia in engineering and technology education.

The capacity of each individual student to understand, memorise, assimilate and retrieve any information, knowledge and concept vary from that of another student. It is here more of the common classroom conventional teaching methods fail to deliver the needed results. The development in computer assisted instruction coupled with the multimedia has immense potential to fill the above limitations in the conventional teaching methods. Particularly multimedia techniques will be of much use to accelerate the understanding, assimilation and retrieval of the information and knowledge. It is a known fact that a student is satisfied if the time gap between a doubt and an answer is as little as possible with convincing logic. The multimedia will reduce this time gap for any student and enthuse him to learn more and more creating interest in a specific field or area. At present it is safely construed that a course of one year can be reduced using the modern technological methods in teaching to cope with knowledge explosion.

The present paper deals with the important aspects that are to be taken into account while introducing any curriculum based on multimedia. This paper discusses about the advantages, limitations and changes that take place in the student environment with implications and difficulties in implementation in the Indian context and the methodologies to be adopted to suit the Indian educational environment.

Industry Requirements of Engineering and Technology Education in India

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Scientific and technological developments taking place at any place anywhere in the world are transferred immediately to any other place of requirement. This has caused quite a number of changes in consumer products, food, social and religious habits. This in turn is changing the industrial requirements. Therefore, it is felt that the industrial requirements of engineering and technology education should raise to meet this challenge.

There are large number of engineering degree colleges producing large number of engineering degree holders annually, a few hundred polytechnic produces more than 2 million diploma holders and craftsmen training institutes produce thousands of certificate holders. These candidates cater to the needs of various industries in different specialisations and skills. In addition to this there are standard examinations for private candidates in all the above three categories.

Presently there are Government Acts, Statutory Rules, memoranda of understanding to create force, co-ordination and co-operation between industry and institute. This in turn will help develop new concepts and methods between these two systems to meet the requirements of industry.

In view of the new industrial, economic and educational policy of Government of India, rapid industrialisation is taking place. The competition at various levels also has increased due to liberalisation policy. All this has increased the responsibility of academic institutes to meet the demand for proper rapid education and training.

A continuously variable system of education and training in tune with the rate of change of scientific, technological and engineering developments are suggested to face this problem. This paper discusses these issues in detail in the context of engineering and technology education in Indian industrial environment.

Technology Solutions for the Changing Linguistic Needs of Indian Professionals

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Globalisation in commercial India has suddenly flash-lighted the deplorable lack of competencies in language and communication in our otherwise brilliant scientists, technologists and managers. It is obvious that the commercial India of the next millennium, will no longer be led by the yardstick of family lineage but by the ability to *make one's presence felt*. The degree is slowly but surely bowing down to and becoming subservient to the acumen to communicate. The awareness and the consequent panic in both the employer and the employee has so far translated into some

quickfix remedies. The poor to mediocre results obtained confirm the author's belief that after a certain age, competencies in language and communication cannot be *taught*, they have to be *learnt*.

Can technology be tried for better solutions? This paper explores the different options offered by technology in this field and how these can be harnessed with effective results in a country of India's dimension with its specific educational and linguistic framework.

Reform in Technical Teaching Learning Process

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The present teaching learning process lays emphasis on the initiative of the teacher and the student is merely expected to follow the guidelines give to him. Also the ability of the student to learn is not put any significant measure of evaluation. This paper proposes a shift to assigned-counselling giving a boost to the initiative, motivation and creativity of the student and suggest mode of implementation of the same.

Problems of Polytechnic and Engineering Women Students

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The study was aimed at probing the problems of women students in technical courses. The sample consisted of 120 women students studying polytechnic and engineering courses studying at Vidyanagar and Tirupati. The sample survey method of investigation was adopted with the help of a problem checklist of 140 problems classified into 5 problem areas, namely academic, teacher, administrative, personal and family. The analysis and the 't' values calculated by statistical treatment of the data revealed that there is no significant difference at 0.01 level of confidence in the problems faced between the students of (1) Polytechnic and Engineering (2) Vidyanagar and Tirupati (3) First, Second and Third Year (4) Rural and Urban (5) Highly educated and less educated fathers and (6) Small and Big families. However in the case of students of (1) educated and uneducated mothers and (2) forward and backward castes, the same was not true.

Experimentation of Autonomy at Government Polytechnic Aurangabad A Case Study

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The rapid industrialisation of the country, globalisation of markets, new economic policy, liberalisation of trades and impact have brought about drastic changes in manpower requirements

in industry. The needs of industry and society regarding trained and skilled manpower are becoming widely diversified and multidisciplinary.

The rigid and broad-based education system prevailing in most parts of the country does not promptly fulfil these needs. This highlights the importance of according autonomy to polytechnics, so that programmes, courses, examination systems, instructional governance and administration reach upto the predetermined quality and lead to satisfaction of the needs of user systems.

Against this backdrop, autonomy has been awarded to Government polytechnic, Aurangabad by Higher and Technical Education Department of Government of Maharashtra from the academic year 1994-95. During last three years institute implemented the project "Autonomy and flexibility" in bringing about a quantum jump in the quality of technical education passouts of the institution.

A review of manner in which autonomy is being implemented by this institute is presented in this paper.

Higher Technical Education in Twenty First Century : Need for Drastic Changes

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Twentieth century has seen the growth of education from a knowledge based approach to more of a need based approach. This is more so in case of technical education since not only the growth in the industrial sector has been phenomenal but also the intertwining of different fields (Mechanical, Electronics, Computers) and the global networking have put new challenges in front of the technical educational institutions. The days of surviving in cocoons and having an ostrich like mentality towards winds of change will result in fossilising the whole set up. Change over to a faster, ever changing, ever responsive educational system is therefore a must.

Few important aspects of this change in the present scenario particularly in view of open door economic policy, invasion of foreign technology through multinationals and global networking, need special attention.

Firstly the scheme of course work, system of examinations and the syllabi all of them have to be put on a dynamic system so as to incorporate changes fast. This will need a continuous dialogue system with nodal industries and a live and vibrant networking with regional institutions of higher education and research.

Secondly all technical education curricula have two important constituents - classroom teaching and industrial training. At institutions of higher learning class room teaching is considered most important and industrial training is merely a ritual. Neither the institution nor the industry give any importance to it. This factor is responsible for producing a technically educated man power with merely bookish knowledge.

Third important aspect needs the development of an effective and active networking of different stake holders and providers. Students, Parents, Industries, Teachers, have all to come together to evolve a system which can mould the technical education in terms of quality, needs of the industrial world and socio-economic forces. This aspect is non-existent at present.

The present paper covers above aspects in greater details and suggests some concrete steps in that direction. It is high time that the institutions are shaken out of their slumber and are freed from the present inertia.

Tourism Education: Its Relevance in 21st Century India

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Tourism has emerged as the fastest growing industry in India. If current trends are to be believed, it is going to be the country's top most foreign exchange earning industry along with a tremendous scope for employment generation.

It is true that the experts in this industry, academicians and management consultants have realised the importance of this trade in the post-liberalised scenario in India. As a result a number of Universities have started the bachelor of degree courses in tourism and also the M.T.A. courses. The Ministry of Tourism under the Government of India has started IITTM in Gwalior as a nodal institute for imparting tourism education, which is also planning to open several regional institutes all over India.

However, the fact remains that present trend is more on opening hotel and catering institutes, both in the private and public sectors. To a large number of experts and academicians in the field, the view is that, to promote tourism one must strengthen the infrastructure like hotels, resorts and restaurants and to develop a well trained human resource group for the purpose.

But for integrated development of the tourist spot, well trained cadre of tourism managers and staff personnel are required. In order to achieve this the study of tourism education should be included in the high school curriculums of India. This will enable creation of a dedicated, well trained groups of potential tourism managers as well as personnel to man the tourism industry of India in the 21st Century.

Hence, in the present paper an attempt will be made to study the need for tourism education in the socio-economic regeneration of 21st Century India within the existing liberalised atmosphere.

Education India (Safety and Health Environment in Manufacturing Sector)

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The advent of technological innovation, faster pace of industrial growth, introduction and production of newer and hazardous chemical substances pose a challenge before the industries in India and other developing countries. This will require the enhancement of the technical competence and decision making capability of the persons in an industry. Training has been accepted as one of the most effective tools to achieve this. Keeping in view the fast technological changes the following few points are illustrated in the paper to serve as guidelines for deciding future strategies.

1. Suitable training packages are to be designed and all concerned persons need to be involved in the task of designing, administration and measurement of training effectiveness.

2. Top to Bottom Curriculum Design/Redesign.
3. Channelling Training.
4. Interaction on Internet.
5. Development
6. The existing system of Teacher-Trainee interaction which develops human touch.

Rapid Assessment for Environmental Education (RAEE) A Case Study

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The Rapid Assessment for Environmental Education (RAEE) provides guidelines and tools useful to a range of audiences for identifying immediate and long term needs in a community or regions for the recommending subsequent actions. Interviews, written and oral surveys, participatory workshops, public meetings and other methods of qualitative and quantitative data collection are used to gather information quickly and inexpensively from people and institutions with a wide range of backgrounds, interests and expertise. The 24 villages of Panagar a suburban town of Jabalpur District of Madhya Pradesh state led to the implementation of environmental education activities. These included development of teacher's manual, workshops for teachers, publication of an ecology guidebook, dissemination of environmental signs and brochures for residents and establishment of environmental resource centres. Evaluation and monitoring will provide feedback for program modification and design of future initiatives based on RAEE approach.

The Optimistic, Pessimistic and Most Probable Scenarios of Indian Education with specific reference to Agricultural Education in the 21st Century

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Futurology, study of futures, has become a virtual necessity in view of the rapid changes taking place around us. It is no longer a static society- it is a dynamic, vibrant, pulsating socio-economic system changing every minute, threatening to throw you off your balance if you are not prepared to anticipate the tomorrow.

Agricultural Education has made tremendous headway in India especially during the post independence period. It is a matter of pride that all the 26 Agricultural Universities in India have augmented their technological capabilities and could bring home the green revolution in rural areas of a number of states.

As Agriculture continues to be the backbone of the Indian economy, a massive application of science and technology can enable Indian agriculture to face the serious challenges of poverty, food insecurity and malnutrition in future. For this, the nature and character of agricultural education will have to change, building on its basic strength built through decades of research and experience. The present study is commissioned to probe into Indian education in the 21st century, with specific reference to Agriculture education. More specifically, the present study aims to see the interface between Future Indian Society, education and agriculture through insights and perceptions of certain individuals and outline the optimistic, pessimistic and probable scenarios of the interface.

The methodology used was the Ethnographic Futures Research (EFR) approach developed by Robert B. Textor at Stanford university. It is used to elicit, analyse and interpret the present perceptions of 30 members of a given society which included experts, policy-makers, employers and politicians with regards to Future Indian Society and education in general and agricultural education in particular. Their responses to the Free-type Opinions were analysed. Generalisations were made based on a consensus of ideas or common content expressed by a majority of the respondents. The scenarios of the interface are then merely holistic outlines which have been categorised as optimistic, pessimistic and most probable.

Skill Oriented Agricultural Education For Self Employment

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Agriculture is the backbone of our country and around 70% of the population are dependent on Agriculture for their existence and sustainability. India is basically an agricultural country and the growth and development in agricultural sector including higher agricultural education and research would directly reflect better growth and quality of life. India has achieved a substantial progress in agricultural production to feed our 900 million people due to the introduction of modern scientific agriculture during the Green Revolution Era. It is very important to train the young agricultural graduates in a modern way not only in increasing the agricultural human resource but also improving the quality of manpower for building up a strong Nation without depending on the food from anyone for our own people. Therefore, skill oriented and problem solving realistic way of agricultural education would largely encourage the young graduates for self employment. Currently top priorities are given to train the students of Agriculture on commercial oriented agriculture. The courses such as Mushroom Production, Biofertilizer Production, Broiler Production, Biocontrol Agents Production, Horticultural Nursery Management, Seed Production and New food product developments are offered to the students so as to give them hands on training with self confidence. A course on agro industrial tie up programme is introduced into the curriculum with a primary aim of enhancing the opportunities for interaction to the students with agro industries. Computer application is emerging in a big way for modern management in private sectors for improving their business in a highly qualitative way. Computer Science in Agricultural Education is introduced to cope up with the changing scientific scenario in modern agriculture. Students of Agriculture are well exposed in rural areas for three months period under Rural Agricultural Work programme (RAWEP). The

students are placed with innovative farmers and they interact with the farmer in the rural situation and learn all indigenous technologies and day to day problems encountered by the farmer. The students gain self confidence in handling the farmers problems at village level. The students are also involved in Crop Cultivation and management aspects of a few important field crops. In such courses they not only attain high degree of management skills but also gain micro-level knowledge which mould for their personality development and self employment opportunity. The dimension of new practical oriented skill based problem solving learning mind in agricultural education would induce and shape strong professional agricultural graduates to focus on the current science and technological transformations in India.

Economics of Education : Scarcity Versus Resources Optimisation

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There is pressure on institutions of higher education and research to generate their own financial resources. Efficient management of financial resources is as good as winning half the battle in the sphere of management of technical and higher education institutions. This paper attempts to suggest the various areas in which the institutions can succeed in increasing their revenue by offering some of their services to industry/society, as well as for improving internal effectiveness and efficiency of the institutions.

Privatisation is the government's response to the process of globalisation, which in turn, helps the government to limit its support to higher education and attend to other serious and hitherto neglected area of school education and adult education systems. The funding from government sources is drying up in the context of new economic and industrial policies which calls for privatisation and a decreasing role for Government in higher education. Hence, there is a dire need to look for more funding from other sources and innovative strategies for attracting these funds.

Since the announcement of economic liberalisation of the Government of India in 1991, we have entered the global market allowing open competition from multinational companies. The basis of competition has improved quality and reduced cost of the product or service. This has made necessary revolutionary changes in the sphere of technical education and training. Quality education at minimum cost is possible only, if the limited resources are better utilised through sound financial management.

Financial management of higher education institutions has acquired importance because of the liberalisation and the economic reforms undertaken by the Government. There is a pressure on institutions of higher learning and research to generate their own financial resources. This paper suggests various means of generating resources and also better utilization of resources.

Conclusions

In Japan, the Ministry of International Trade and Industry (MITI) is involved closely in planning and development of universities and higher institutions. In U.S. and other developed countries, a new phenomenon is observed that the industries are flocking round the universities, and technical

institutions are only source of meeting the human resources requirements of industries. The Indian industries should come forward to share the burden of Government in funding the universities and technical education.

HRD Strategies for Globalization of Education for Achieving and Sustaining Competitive Advantage towards 21st Century

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As we approach the 21st Century the phenomenon of change has become an everyday acceptable way of life. The social, economic, political changes have become wider in space, deeper in impact and at greater paces in life. The coming century will be dominated by globalization. The process of globalization has been brought about by environment reformation - Physical, Social, Cultural, Economic and Technological. Indian economic and structural reforms leading to globalization means new skills and changing skills that must be upgraded constantly. It refers to forward planning and policy making for Human Resource Development needs to face the challenges of new century.

Human Resources are the most vital input the success of national Economic and Social Development, while the skills, expertise and attitudes of the workforce are a prerequisite for organisations/institutions ability to adjust to changing situations. Due to the mega trends in Information, Communication, Technologies all have come to accept the new requirements of the restructured, re-engineered, reinvented organisations and jobs and processes. This posed the greatest challenge to the HRD professionals and institutions.

The major objectives of this paper are :

- firstly to identify and analyse the new paradigms of globalization and their consequences;
- secondly to explore the pressures/tensions of globalization on humanity; and
- lastly to design, for HRD strategies for globalization of education the 21st century and suggest the means for achieving and sustaining competitive advantage.

Globalisation and inter-dependence are the major forces in contemporary life worldwide. As a result HRD professionals are faced with totally new challenges. The control of change is developing as part of normal life and the control of conflict arising from change must be a creative process in which conflict is regarded as productive opportunity. HRD becomes a multinational effort now to keep pace with globalisation.

Keeping these views in the forefront global education has a catalyst role to play in personal and social development. It must foster a deeper and more harmonious form of Human Resource Development and thereby reduce poverty, exclusion, ignorance, oppression, war and establish a culture of peace.

In this attempt the major focus is on the megatrends and designing of the system that is likely to shape our societies with regard to the development of the human capital for the achieving and sustaining competitive advantage in the 21st century.

Teacher of Health Professionals in Educational Science Technology and Managerial Skills

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Is teaching an art or science? In today's scenario of innovative world where everything can be developed, so can the skills in teaching and training. Gone are the days when one was considered to be in the teaching profession if one was a born teacher. In the field of medicine or any other technical profession there never was a formal training in the science and art of teaching, although, it is mandatory for the school or college teacher to be trained in educational technology to get a regular teaching job. In the late 60s it was introduced in the medical profession and MCI recommended establishment of either Medical Education Department or a Unit to train the Teachers of Health Professions to sharpen or develop the skills of teaching. The Government has recognised four National Teachers Training Centre (NTTC). The first NTTC to start this activity was established at JIPMER, Pondicherry. The centre at Maulana Azad Medical College, New Delhi was the 4th NTTC of its kind started in September 1987. The objectives of the centre were to train the teachers of Medical, Dental, Nursing, Homeopathy and other areas in Educational Science Technology through workshop method of interactive approach.

The areas covered in the course are, System & Systems' approach to education and Health Care Delivery System; Communication Skills, Methods and Innovative Techniques such as Educational Games for Adult Learning Educational Objectives classification, framing, priority setting; Research Methodology and Project selection, planning and implementation with report submission; Teaching/Learning concepts, principles and strategies for Method and Learning Resource Material selection and appropriate use; Evaluation, principles and concept with Criteria for selection and appropriate use for Education, Health Care Delivery and Programme Evaluation. All the topics are introduced with appropriate examples, exercises, either individual or in small groups with discussion and modifications at the end by the resource persons.

Trends in Education : Past, Present & Future

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In a scenario that is highly competitive, the old trappings of power, i.e., money, material, land no longer hold sway. Today, as we hurry past the familiar landscapes of the bygone industrial era, we find ourselves in cyber-space, and, the erstwhile libraries getting metamorphosed into cybraries.

In the new millennium, when we do not know whether our planning for a five-year-term will fructify, we cannot visualise secure jobs and long careers. In such a situation do we need a system that teaches the child to learn by the rote, to become a whiz-kid, a genius, knowledge all

details for winning a quiz competition? The child knows all facts, true enough. But does he know to what use this knowledge is to be put up? There is no moral education of any kind today. Education which fails to explain to use in a language we understand, our central conviction, is a meaningless entity and in danger of extinction. Education has relevance only when produces "Whole man", a man who has courage of his conviction, the very meaning of existence, but knows the meaning of life.

Our existing education system is fashioned on the assumption that the teacher is a know-all. The child is thus schooled from early infancy that there are things, facts, knowledge bank -- that have to be mastered to know and understand the world.

While traversing the uncertain terrain of tomorrow, and to be winner, we have to unlearn all these. True, we still need to know facts, skills, knowledge and data bank. All have their relevance. But these things are available to the intelligent masses of today, at the press of a button, courtesy the computer revolution.

The schooling today, therefore must guide the generations ahead in building up confidence and utilising the knowledge explosion, confession, bewilderment, frustration, alienation, estrangement - all will thus be mastered.

Organisation of Educational Systems in India : Challenges for the 21st Century

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Education systems in India need a thorough overhaul. Primary education is beset with mediocrity in the hands of the State and elitism in private hands. Tenth standard and 10+2 have lost their relevance as the same State does not give credence to their own Board controlled educational standards and conducts a state wide entrance once again for admission to Professional Colleges. Syllabi of Professional courses are too narrow and do not provide a broad based first degree. Witness the National Liberal Arts Curriculum in USA, which is a mandated core for any first degree.

Quality of education suffers due to lack of world class teaching resources, apathy of teaching staff, union rule of non teaching staff, low salaries, the tyranny of the grant-in-aid system in which the staff is paid directly by the state and the College Management, be it the privately managed college or the Principal of a Govt. College hence have little or no control on their staff. UGC by blindly following inherited British systems has emasculated the Universities. Instead of being a developmental and supportive organisation it has become a control body with all the ills. The concept of faculty independence and Tenure are unknown. Rotation of head ship has made the all important position of the Head of Dept a merry go round and the departments, hot beds of politics and not academics. One can honestly say that there is no college of department or University in the country which say with pride that their standards have gone up. Is there a remedy?

We have to write a new constitution of Education in the country, where both Govt and the courts keep off, and let Academic control the educational process from admissions, to teaching to financial management to funding for growth and development, be responsible for raising resources in form of endowments, use State grant only for Capital Expenditure and not for wasteful consumption and conduct valid industry standard research and earn by research grants from industry and patent royalty.

Educating Market, Marketing Education

*Ravindra G. Dastikop
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Until very recently, education and markets were treated as two separate islands. Education was a non-profit service sector and market was profit oriented. But now things have been changing for ever. Education gearing up to become an industry by user and market opening its eyes for new marketing opportunities education. This has two important implications.

This calls for an active link between education and market and we at EDUMARKET are working towards establishing this. Our mission is to link Eduzen (every one in education) with the markets (products and services) through a range of information products and service.

In the above paper EDUCATING MARKET, MARKETING EDUCATION I will try to explain the growing importance of education as market increasing interest of companies to make most of this burgeoning market what I along with UMAEKWAR have been doing to develop an education-market interface, our experience in this venture during last 2 years and our future plans in this induction.

FMEA and QFD as Accountability Tools in Education

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Educational system has been recognised as an important factor for a nation's development. The three important expectations from the educational system are : 1. High standard 2. Proper Accountability 3. Higher Productivity. Of late educational systems have been found to be involved more in routine activity rather than complying with the stated requirement. This paper deals with this vital issue and a solution procedure is being analysed. Total Quality Management system which is focused on delighting the customer provides a proper systemic support and inculcates quality culture in the people involved. Such a system is found to incorporate accountability factor in it and paves way for continuous improvement, there by ensuring higher standards. Quality conscious people while working with a proper system support are sure to show high productivity.

The educational system has two fold customers and their satisfaction is the prime factor. The international customers are the students and the external customers are the employees, the Government agencies and public at large. To understand their needs and to convert them as process parameters, a technique called Quality Function Deployment (QFD) can be adopted. Once these notified processes are followed and found fruitful they can be standardised which ensures customers satisfaction. Accountability is indirectly taken care of in this exercise.

New Concept and Methodologies For Innovative Interaction

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It has been felt that one of the reasons for the continuing weakness of our Technical Education system is the absence of any effective linkage between industry & AICTE, industry & university, and industry & institutions.

The working group of Technical Education (1997) and also the Ayudamma Committee on Post-Graduate Education and Research (1980), emphasised the necessity of effective participation of industry in organising Technical Education & Research at all levels.

The Industries are critical about performance and competence of arranging field training/ industrial visits, project work, placements and also fund R & D programmes.

There may be lapses on the part of the institutions. It is also true that there are difficulties on the part of the industries. But if it is appreciated that the entire exercise of the Technical Education system is aimed at producing technical personnel required by the industry, effective collaboration between various levels is a must.

This paper discusses about the new concepts and methodologies that should be employed in order to remove the various inhibitors and establish an effective and meaningful reciprocal interaction between various agencies like AICTE, institution, university and industry.

A Customer Oriented Approach to Strategic Planning for Institutional Development

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Due to liberalisation and globalisation of Indian economy and major break through in Information Technology, remarkable and radical changes are being felt in the educational scenario. The education sector is poised for witnessing intense competition. Like any other sector it is also going to be driven by market forces. There will be more demand for expertise in specialised areas, distance education, continuing education, part-time courses and flexible system of selecting courses and pace of study to suit individual needs. Emphasis will be on use of educational aids like CD-ROM, Multimedia, Internet, etc., development of relationship/ tie-up with industries and research and education institutions at national and international level, providing good placement to students, judicious spendings and utilisation of resources based on cost-benefit analysis, image building and so on.

Relationship between teacher and students is changing from Guru-Shisya-Parampara to that of supplier and consumer. So education institutions functioning on traditional pattern are likely to experience a future shock and face difficulties in coping with changes.

The paper presents a model considering need for customer orientation and quality in education as strategies for development of educational institutions. An educational institution can survive and grow if it can equip its student to get good placements. For this the institutions must identify the attributes which the recruiting organisations are looking for in passed out students. Then efforts can be directed towards building these attributes into the students. Some of the attributes may be theoretical knowledge, practical knowledge, analytical ability, communication skill, physical fitness, broad out look, etc.

Education of The Present and Future

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Educated mass plays an important role in the development of a country. Education being the foundation of life, which brings in a change in the mind and leads to ultimate welfare and health of humanity. There is much talk on the globalisation and liberalisation of economy in the recent past which is used as a strategy for survival and growth. In such circumstances education should not be far behind. The present paper aims to locate the lacunae in the existing education systems; and to suggest some measures to improve the present education system in the light of future requirement.

Learning Organization and Organization of Educational System

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India the sleeping giant wakes up in the dawn of 21st century. The objective of education will be set to cater to the demands of the whole human civilisation. Education shall be the only hope for human sustenance.

Such an educational system will be based on the strategy of 5 I's identify, information, intelligence, improvement, and impress i.e. identification of the human problems with respect to time and space i.e. whether the problem is economic, political or social, etc. is to be identified first. Then, information past and present in and around has to be brought into in order to diagnoses and remedial measure. Intelligence is to be applied to switch on and apply suitable technology to solve the problems. Improve, after the problem is solved people should use education to improve so that the problem does not recur.

Impress your technology, so that others follow you and the same can be used again and again. The organisation of education will have the ultimate target as 'Human Reforms' or 'Subject Reforms' (subject means people coming in contact). This 'Subject Reforms' may have undivided patterns of re-engineering. Transformation into a learning enterprise, importance of unlearning, leaving behind a lasting organization on completion of project.

Seven keys for promotion of Re-engineering Educational system will be learning :

1. the method of understanding the social, political, and national needs.
2. the outline of public satisfaction survey.
3. the concrete methods of easy and quick means of solving the peoples problems.
4. the methods of concurrent working, technologies.
5. to analyse and pinpoint expert system.
6. to handle information technology.
7. to stick to the source of knowledge while promoting and applying new technology.

8. to identify use the cause and effect of any new technology with retrospective and perspective social and national needs.
9. to unlearn to prepare for war and anti war.

Education in India as a Problem of Managing Local Commons

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India, with its sociocultural peculiarities, low standard of living, and huge population, has always been a challenging puzzle for all sorts of social sciences both theoretically and practically. One thing that is certain is that, just like with any other country, education can improve conditions in India perhaps considerably. The problem is how can this financially poor country manage to educate its masses of would-be pupils and students. My answer to this question is to treat education as a local rather than global commons problem. By the term "global", I mean "national Indian", and by the term "local" I mean any sub-national jurisdiction, from prefectures to villages. Education could be thus turned into a "private" matter of each community, offered the way a community views and can manage education. Two types of common resources will emerge: firstly, the resources extracted from community members in order to be devoted to the education process, call them "input resources". Secondly, the resources comprised by the market reward to the outcome of this process, by the earnings of the working people that have been educated by a community, call them "output resources". Property rights for both of these resources will be exercised collectively by the members of a community taking into account that there will be rivalry in the consumption of either type of resources. The rivalry with regard to input resources, lies in the fact that each community family will want the best for the education of its children with the least cost for it. The rivalry with regard to output resources consists of the fact that the educated children who have entered the workforce, will want to maximize the part of their earnings remaining with them. That is, I imagine education in India, like a partial scholarship program from a company: A scholarship recipient has to cover himself a certain part of the expenses and has to do something for the company soon after the degree is awarded. He would like to minimize both his own part of the expenses as well as the services or payment he has to offer to the company in return for the scholarship. The company would like exactly the opposite, i.e. to maximize the quantities the prospective student wishes to minimize. The examination of this kind of conflict is one purpose of my work. Other conflicts that will be investigated are those among community members in so far as the distribution of costs, education costs and benefits are concerned, or what happens in view of the prospect that a pupil or student backs off from his commitment to education. The discussion of conflicts like these will help assess the viability of the proposed educational system.

The Role of Collaborative, Flexible Learning in the Provision of Business Education to Developing Countries

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Gesa Walker

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There is a need for business education in developing countries both from a global perspective and from the perspective of developing economies. There are however, problems :

- the comparative isolation of developing countries,
- disadvantaged communities,
- economic problems of education provision,
- expense of full-time and part-time provision of education, and
- the problem of theoretical, content-based learning.

A collaborative, flexible learning model can counter many of these disadvantages. It can provide

- three-day workshops interspersed during the academic year and with international and local facilitators;
- regular tutorials with local tutors and with proceedings recorded and sent to students in outlying areas,
- distance education materials of international standard with local content;
- regular assignments with support from local tutors and evaluated by both local and international tutors; and
- student support through

- ⇒ group-based, interactive learning
- ⇒ one-to-one interviews with tutors,
- ⇒ telephone,
- ⇒ fax,
- ⇒ e-mail,
- ⇒ internet,
- ⇒ audio cassettes, and
- ⇒ videos.

It can offer a modular structure with multiple entry and exit points. It can provide open access with bridging programmes and recognition of prior learning for students who have been previously disadvantaged. It is ideal for the full-time worker who need not have the pressure of extended periods away from the workplace. It is a validated, researched programme with recognised success rates. It has a strong vocational focus with an emphasis on work-based learning. It is cost-effective in comparison with other business programmes.

Such an approach is not confined to conventional business education and has been applied to other forms of education and to developmental strategies. The Napier University collaborative, flexible learning model, in comparison with other distance, open, full-time, and part-time models, illustrates this. It provides opportunities for participating with institutes in developing countries.

Opinion Towards Infrastructural Facilities At Training Centres

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Hisar

The study was conducted with the view of examining infrastructural facilities of assessing the efficacy of training programme. A sample of 282 trainees and 18 trainers was taken from six Anganwadi worker's Training Centres in North-Eastern Zone of Haryana. The data collected with the help of structured interview schedule revealed that majority of the trainees had favourable opinion towards training. Regarding their opinion towards the facilities available it was found that majority of them had favourable opinion. Among physical infrastructure the facility of mess only was found to be satisfactory. The toilet and water facilities in hostel were found to be dissatisfactory by trainees as well as trainers. Dissatisfaction was found towards classroom, library and recreational facilities. The major problem felt by trainees and trainers was of little stipend/honorarium received by them. The size of classrooms was also found to be small and were overcrowded as the number of trainees is large as felt by most of the trainers and some of the trainees.

Values in Education : The Need of the 21st Century

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In the progressive human race, human conduct has been deviated from the normal social life to complex mechanistic function of survival of existence. Peace and Harmony have become intangible phenomena and also become the prime necessary factors for comfortable life. Psychologists, Anthropologists and Sociologists have been emphasizing the power of values in affecting individual action and group activities. Values provide motivation, energy drive, perseverance for one's action and even self evaluation and correction. About eighty years after Dewey's Moral Principles in Education, and almost thirty years after the Taxonomy of Educational Objectives, both of which gave attention to the realm of values, still there is an imbalance which overwhelmingly favours the cognitive domain and is reflected in the attention of present curricula.

A glance at our educational system will tell us how far our educational institutions have been successful in making value education an integral part of education in the vast majority of our schools. Though maiden attempts are being made towards it, the methods of value education are largely such that encourage memorisation, moralising and rote learning rather than responsible person and decision making.

Society is an association of human interactions, interrelations, conditions and consequences. There is a "Paradigm Shift" in social culture. The knowledge that is being disseminated is of acquiring material prosperity without spiritual fulfilment. In pursuit of knowledge, the wisdom is lost. High-tech advancement shifting people's attitude from 'being humane' to 'becoming machine' wherein human values and peace of mind are absolutely myths.

The present paper highlights the Educational Objectives and analyses the strategies of imparting them in school education. The paper also focuses the need of value orientation for students as well as teachers, and highlights the research perspectives in value education.

Hold Fast to Values - A Thrust For Education

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Life is like a journey across a wide ocean. On this journey we encounter many forces that threaten our lives and seem to push us over the edge of safety into the turbulent sea. But the good-news is that our plunging ships do have LIFE-RAILS that we can grasp and cling on to. These life-rails are the VALUES OF LIFE. It is to these life-rails to which education today has to guide our youth who are faced with new questions, new challenges, doubts, disenchantment, expectations and dreams. Further, all education is value education. "... The growing concern over the erosion of values and increasing cynicism in society, particularly among the younger

generation, has brought to focus the need for readjustment in order to make education a forceful tool for cultivation of social, ethical and moral values" (NPE, 1986, 8.4). This spells out the giant responsibility of educational institutions .

Educational institutions have to be the most appropriate places where values of life become realistic and concrete. Their role would consist in guiding students towards positive personal values, social values, behavioural values and moral/spiritual values.

Following are some of the strategies :

1. Instructional Objectives as a Focal Point for Value Clarification.

- Identification of personal, social, behavioural and ethical values embedded in institution's educational objectives.
- Evolving of and Action Plan to concretise the values through day-to-day curriculum.

2. Value Integration through the curriculum.

- Identification of value components at the 'plug-point' in textual content.
- Discussion an Action Commitment on the value identified.

3. Education for the Caring Impulse.

- Caring for humans, environment and the sublime to be an essential goal of the institutions.
- Programmes of the institution to be experiential, and to be directed towards achieving the 'caring impulse'.
- Literary and humanities club activities to provide exposure to this need.
- Extension education to provide awareness and action to inculcate the caring impulse.

Conclusion

We pass this way once; any good we can do, let us do it now. If all our learning and training cannot make us persons with good values, then our education is a failure.

- While planning for a year - sow corn
- While planning for decade - plant trees
- While planning for life - train and educate people

Alternate Educational Programmes in Tamil Nadu, with special reference to Pudukkottai District - An Impact Study

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Education does not start with property or assets, it starts with education. Education affects all factors and brings out the latent and untapped potential of manpower to make the resources optimum level. Education is a Pre-requisite tool to enter into the process of modernisation and development of an individual and ultimately growth of society. The constitution of India conceived universalisation of elementary education by 1961, but in 1997 the country is still away from this target.

Mahatma Gandhi considered "Education as a tool for the development of consciousness and reconstruction of society". About fifty percent of our population have remained separated from the process of education, in which the condition of women is still worse.

Keeping these factors in view, the National Policy on Education (1986) emphasised the need to concentrate on adult literacy, as an alternate education. As a result NLM (1988) followed by EFA Summits (1993) formulated Policies regarding alternate educational programmes to cover entire age groups with the intention of promoting Universal human values, the quality of human resources and respect of cultural diversity.

Accordingly, Pudukkottai district is one of the model districts and has been declared as the first TLC District in Tamil Nadu. It has systematically implemented Total Literacy Programmes for 9-45 age group, Universalisation of Elementary Education, Priority Programmes for Girl Child, Women and SC/STs, Improved Teacher Training Programmes, Non-formal Education, Early Childhood Care and Education (ECCE), Post-Literacy Programme, Legal Literacy Programmes, Vocational Education, Health for All (HFA). The present paper makes an endeavour to dwell at length the impact of different educational programmes alternate to formal education, to different categories of people and different age groups especially women folk under the head of EFA.

Democratic Value Education - A Strategic Appraisal

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In a socially plural, regionally imbalanced and culturally diverse Indian Society, it is more likely to work as isolated groups than as one unit. There are various factors-economic, geographical, religious, lingual and many others which have been erupting from time to time and giving a jolt to the gradually emerging concept of one-ness. In this direction there is a dire need of all out efforts to supplement all socio political and economic efforts by educational efforts.

By imparting democratic value education, the practising teachers can play a significant role to the great task of National reconstruction. The conventional methods of value-education are based on persuasive method and suffer from the air of indoctrination. It has rendered itself quite ineffective in the face of multiple impact of all other forces like family, community, religious institutions and exposure of uncontrolled media programmes. The educational literature refers to a number of newer methods of value education. The two methods namely self confrontation of Rokeach (1973) and value clarifying method of Rath (1978) have been empirically found effective for value education.

Rokeach's value-self confrontation strategy is based upon his *Belief System Theory* which basically moves around the most fundamental class of beliefs.

Value-clarification theory (Rath et. al 1978) consists of four key elements: a focus on life, an acceptance of what is an invitation to reflect further and a nourishment of personal powers.

In the course of the empirical investigation of the authors, it has been found that all democratic values are not a function of education. Such as **Sympathy and Cooperation** are not affected by any method. The self confrontation strategy was found more effective than the clarifying response strategy for values like **Equality, Openness and Responsibility**. On the contrary, the clarifying response strategy was found more effective for **Individual Dignity and Tolerance** than all others.

The value education has also been found to be a function of personality and behavioural types and no strategy was found uniformly effective for all values as well as for all personality & behavioural types.

Are these methods uniformly effective for all the democratic values?

Can these methods be equally effective for all types/styles of personality and the behavioural types? Are the focus of the present paper.

Impact of Education on Values (e.g. Family Ties, Culture, Sports and Entertainment)

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Impact of Education on values plays a major role in shaping a good citizen. Education in basic human Values-truth, righteous conduct, peace, love, non-violence etc. will take humanity on to the path of a happy, contented life. Values are universal and transcend geographical boundaries and time zones.

The culture of the people in India is essentially religious because in the vedic vision of God the world is non-separate from Him. The Vedic Epiphany belongs to the heritage of mankind. It is a religion of and for humanity. The Vedas provide a human experience of universal and eternal relevance. It is capable of enriching and challenging modern man as he seeks to fulfil his responsibility in an age in which he is inseparably linked with his fellowmen and can no longer

afford to live in isolation. The vedic experience will reawaken the true spirit of Man which is at present numbered by the stress filled and the heavy pressures of modern man. Modern man could usefully assimilate the experience of Vedic Man, learn and apply those aspects of it that will help enrich his life in the 21st Century.

Paper also focuses on the achievements of Bharat Kalachar a The Cultural Wing of Padma Seshadri Group of Schools .

Impact of Education on People

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In this paper, author deals with series of important issues on education - need and relevance of formal education and its impact of people. The paper also deals with wide ranging issues like, globalization, industrialisation, economy, population structure, etc.

Governance of Business Schools in India : Issues and Concerns

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Management Education in India is passing through a critical stage. In the post liberalization period there has been a meteoric rise in the number of business schools. There were about 120 business schools in 1992 and by 1996 this number has increased to about 500. This steep growth calls for a comprehensive re-engineering of management education system covering areas like establishment and governance of business schools, curricula design, selection procedures, teaching and training techniques and above all, bring about a shift in the management education with an increased emphasis on industry - friendly management education. This paper mainly focuses on the issues pertaining to the establishment and governance of business schools in general and autonomous business schools in particular.

Establishment and Governance

The establishment of business schools is the country in subject to the approval of AICTE Act 1987 which stipulates that no new institution shall be started or no new course or program shall be introduced without the permission from AICTE. AICTE has devised a systematic process for inviting applications, scrutiny of such applications, inspection of proposed projects and sanction of approvals. Each application is processed in accordance with the criteria laid down.

During the later part of eighties and afterwards a number of permissions, have been given to autonomous institutions, university departments and affiliated colleges of universities. The university departments are run under the supervision of universities and UGC guidelines and hence the areas like appointment of faculty members, curriculum design, examination patterns and evaluation do not pose any problem.

The major concern is the establishment and governance of autonomous business schools. A number of the present generation business school starters are not having any experience or exposure to business education nor are they aware of the needs of business industry.

Impact of Education on Values System

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Value is the base of meaningful human life. It is defined as one's judgement of what is valuable or important in life. Human being is a constituent of a social group. Every human being by education, by cultural heritage, by impressions, forms and adopts certain values to live his life. In a society certain values that are useful for peaceful satisfied life are accepted and cherished and some times, taught and also imbibed in coming generations. In course of time they become the part of the cultural perceptions of the society.

Education is one of the most powerful media creating impressions on the minds of children and adolescents. Student population live in a family, groups, society and nation. Every area of operation directly or indirectly continues to create impressions on the minds of this population. This being an impressionable age, the care needs to be taken by all in schools, family and also in society to see that those principles of behaviour, which forms the foundation of rich, meaningful and socially useful life are created.

Unfortunately Education system is slowly becoming disfunctional and counter productive. Hence it has become necessary to reorganise this system giving due waitage to values. India's rich heritage, with vast canvas of knowledge and enlightenment and philosophy of values has been given a back seat and materialistic aspirations have taken over the driver's seat. This order needs to be reversed. Hence in the changed context of scientific and technological developments education needs to be redefined, reorganised, reshaped and recharged.

It is the challenge before the educationists to draw a programme to prepare a 'Man' to understand, adopt, adhere to the values for rich, satisfactory and meaningful individual and social life. This becomes more essential in the era of liberalisation with additional dimension of human rights. Indian Society today, needs a second revolution, a revolution of values and education is to be the vehicle of this revolution.

Impact of Education on People

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The next millennium is to be commenced only after three years. The past two millenia were full of violence. The twentieth century must go down in the history as the period when humanity reached the upmost depths of barbarism.

In the past forty years man has demonstrated his skill at enabling large number of people who would not have survived in the past, but only to survive in poverty, in ignorance, in sickness and often in degradation. The twenty first century will witness the world of famines, distress, poverty, unemployment, diseases and hunger and it is a patent fact that, hungrier world grows more crowded and hungrier. Many countries world over are becoming classical examples of endless and unlimited needs competing for severely limited resources. 'Poverty enhances fertility and fertility enhances poverty' many of the countries have infact become the worst victims of this vicious circle.

Population if manageable and efficient is an asset to any country. It is the index of its inner strength but if it becomes unmanageable it eats into the vitals of the nation and becomes rather an unmixed evil. It is universally recognised that accelerating growth of population during the past 4-5 decades has not only greatly affected the socio-economic life of the people in the various parts of the world but also threatened to upset completely the economic and social arrangements of the society.

Since the real study of mankind is 'man', education should not be in isolation from the community. Education is the strongest shield and sharpest sword against all human problems. Education has infact played a major role in the transition of human life all over the world. Education also exercises a strong negative influence on family size. Only education has the potential to reach billions of individuals.

The paper examines critically the impact of education on the various aspects of human life and the role education will have to play in overcoming the possible problems of mankind in the next millennium.

Value Education Through Content Areas

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Values are belief upon which a man acts by preference. Values help us not only in self evaluation, but in self drive too. An educated person without values has thoughts which never flow in action.

Broadly speaking, there are two types of values : eternal and temporal. Eternal or absolute values like truth, beauty and goodness are mainly related with moral and spiritual development of a person. Temporal or mundane values are contextual in nature, and are essential for our personal and social development.

Education that helps in discrimination between what is right or wrong, proper or improper in thought and action of an individual may be termed as value education. It develops positive attitude and constructive approach in our day to day activities. It is through education that the society seeks to preserve and promote its values aiming at all round development of the learners' personality.

Education, both formal and informal strive to achieve the above mentioned goals employing a variety of content areas in the form of curricular and co-curricular activities. The four basic disciplines i.e. Languages, Social Sciences, Sciences and Mathematics represent the major content areas of education. The curriculum of all these school subjects is planned in such a manner that appropriate values may be inculcated among the students at various stages of education.

The content of any language, specially its literature, contains maximum potentiality of inculcating values by its readers. Poems, stories, novels and dramas representing a variety of characters in varied like situations provide maximum opportunity to experience and inculcate different types of values like personal, emotional, moral, social, aesthetic and spiritual etc.

Social Sciences consisting of content related to History, Geography, Civics and Economics encompass a variety of social, environmental, political and economic values essential for the individual to adjust in the society. The study of sciences and mathematics is helpful in understanding and assimilating biological, hygienic, rational and disciplinarian values.

In the modern times when the crisis of character and the degradation of values are seriously affecting our growth as an independent nation, the teachers have to be specially cautious in re-orienting the teaching-learning activities in the classroom. They have to teach not for the sake of examination alone, but for the development of human values too. The phrase 'Example is better than the precept' has to acquire new meaning, and direct the teacher to inculcate values among the students by utilizing the examples and situations already engraved in the subject matter prescribed for different stages of education.

Inculcation of Values and the School Curriculum

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Values are norms of behaviour which have been evolved during the course of time in the social, moral and spiritual fields or we can say ideals in various fields of behaviour.

India having a rich cultural heritage and human value is struggling today to keep the values alive. The erosion of ethical and moral values in our society is growing at a faster speed.

The growing concern over the fast erosion of values has made the conscious citizens including the teacher community to find suitable channels to inculcate values in the present generation particularly the growing boys and girls. The teacher community which is closely attached with the total system of education should focus the need to introduce Value Education in the school curriculum as education is a tool for the inculcation of values.

An effort has been made in this paper to highlight the role of Teachers to foster value education among our children which would also help to bring unity and integration of our people.

Study of Multivariate Analysis of Perception Related to Family Welfare of Rural Adults in Tamil Nadu

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The study is so significant that volumes of Research have been produced during the last half a century yet for policy purposes there has been no focus on critical variables which influence perception of eligible couples at the grassroot level. The objective of this present study is to fit an appropriate model of inclusion or exclusion of a set of variables which are presumed to be influencing the perception of Family Welfare of Rural Adult for future prediction. This particular study has taken into consideration certain statistical control by using multiple logistic Regression using wald's statistic and has sifted certain variables which are fundamental to perception of eligible couples.

The variables identified in this study could be used by policy makers for evolving purposeful family planning packages and the basic hypothesis fits in well even under statistical strictures.

Ancient Education - Foundation Stone of Human Development

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Open University : A Substitute of Traditional University

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The main features of the study are as follows :

1. To study the development of Open University in India.
How to impart education through distance education, what is its relationship with open education. Why is there a difference between the two systems of education?
3. To study education through tele-communication system.
4. Study of administration of the Open University.
5. Study of direct admission and admission in Open Universities.
6. To study syllabus of Open University.
7. To study education system and study centres of Open University
8. To study examination system of the Open University.
9. Participation and contribution of Open education in higher education.

Interview and observation method were adopted for the research work through historical system.

Information were collected through two means.

1. General Context
2. Periodical Publication.

Advantage of Open University are as follows:

1. Open Universities liberalize high education
2. They are free from hard ties of traditional university system.
3. Admission is not a major problem like the traditional university.
4. Open Universities are free from indiscipline problem.
5. Attendance rules are not applicable like regular Universities.
6. Open Universities are free from using unfair means.
7. Selection of subject is completely of the choice of the student in the open university.
8. Various types of education like, correspondence, telecommunication, summer vacation classes, community education, contact methods and essential classes are adopted in open university.

Development of Gender-Sensitive Open Learning Systems : A Social Audit Model

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A social audit of educational and training interventions leads to an examination of specific gender-sensitive interventions that could shape the process of curriculum design and course development. These should include gender needs assessment, identification of gender assumptions in policy and planning; dissemination; generation of skill development and conscientization inputs; creation of appropriate support systems for women learners.

The paper explores various facets of social audit for promoting interventions with human resource and therefore; gender implications. The issues in focus include:

- Who is being targeted by the proposed policy/programme/project and what assumptions are being made about them? What evidence is there that these assumptions are well informed?
- Who discussed the goals of the intervention? Are these goals shared equally by women and men? If not are there reasons for supporting the intervention on the grounds that it would enhance gender equity?

Whose interests are being promoted through the intervention?

Policy underpinnings need to be elaborated for effective social audit. Open learning institutions can adopt policy stances which are gender neutral, gender – specific or gender redistributive /transformative. Gender-neutral policies do not challenge existing divisions of learning resources and responsibilities. Gender-specific policies favour targeting activities and learning sources which women are likely to control or benefit from. These may also leave the existing division of resources and responsibilities intact.

On the other hand, gender- redistributive /transformative policies seek to actively change existing gender relations through more even distribution of learning resources and responsibilities.

These policy stances would also lead to differences in the way self - instructional education and training material is designed and developed.

Education For All and Teacher Education in India through Distance Mode

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Education accessible to all, irrespective of the caste, creed, religion and status of each and every individual member of the society is the basic theme of 'Education for All.' Teacher is an indispensable element in the process of teaching and learning in formal situation, proper training

and education of teacher is a most important step in the ladder of educational development of the nation.

The National Council for Teacher Education (NCTE), developed detailed norms and guidelines for such programmes designed to train teachers for various educational institutions in India, and recommended regular mode of pre-service teacher education programmes for freshers.

The Distance Education Council (DEC), another statutory body has also set up norms and standards for courses and programmes offered through distance mode, including Teacher Education programmes like B. Ed. Self-financed programmes organised by a number of universities are also posing another challenge. Since, NCTE is not a funding agency like U.G.C., financial assistance linked control is out of reach of it. Finance is concerned either with the state or the central government and therefore, any norm and standard non-sustainable financially by the funding mechanism, is impractical and inappropriate for the qualitative improvement of teacher education.

Ever increasing population is imposing a great challenge before implication of such norms and standards too. Lack of well trained and good, intrinsically motivated teachers and teacher educators is another issue. Psychological and social pollution prevailing in most of the teacher education institutions in India cause damage to the career of teachers and teacher educators. These factors work against the revitalisation of our teacher educational programmes and to get rid of them, we, certainly have to accept the distance mode in the field of teacher education.

Whatever control may be necessary and compulsory should be related with the policies concerned with admission, course conduction and practice of teaching. Evaluation should necessarily be the direct integral part of the programme and continuous in nature in contrast of the present day regular programmes.

Lastly, it is also proposed that no class or division should be given to any prospective teacher after completion of teacher education programme but a mere certificate of attendance and course completion will be taken as sufficient to avoid the chances of using unfair means in examinations.

Role of Assignments in Distance Education : A Case Study

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Distance education is characterised by absence of direct contact between the distance learner and the distance teacher and the use of multi-media in teaching-learning process. Out of the various media that are used for this purpose, assignment plays a pivotal role. In the process of distance teaching, printed study material along with a set of questions called assignments is sent to the learners. The learner is expected to study the text, work on the assignment and send his/her response to the concerned study centre/institution within the stipulated time.

The assignment sent by the learner is then sent to course counsellor for evaluation. The evaluated assignment is sent back to the learner so that he/she is in a position to know how far he/she has been able to grasp the subject-matter. The marks/grade awarded in the assignment is counted towards the final certification of the learner.

But the function of distance teacher is not only to evaluate the assignment response of the learner. As a matter of fact, the most important function of a distance teacher is to help the learners learn from the course units. He/she to find ways to communicate with the learners to help them in their effort to study. In order to inform, guide, inspire, help, encourage and motivate the learner the distance teacher writes comments on the learner's response sheet. Most of the academic support to the learner from the institution is in the form of tutor's comments on their assignment response. But this is not an easy task as written comments may easily be misinterpreted. To avoid this situation, the teacher has to be cautious while writing the comments.

To teach effectively, the tutor comments should be of teaching type, appropriately worded and properly placed. They should be encouraging, accepting the strong points of the response, indicating where and how the response has gone off, the point and suggesting as to how that could be improved. They have to be well thought-out, deliberate, palatable, precise and pedagogically purposeful. The assignment should be useful to the learners in their study and the number of assignment per paper should be appropriate. The despatch of assignment and evaluated assignment has to be made on time and the assignment should be so worded as to be comprehended by the learner without much difficulty.

The Indira Gandhi National Open University (IGNOU), New Delhi offers various courses to the learners spread throughout the country. According to the provisions of the University, learners are given three assignments in each paper to work on. Submission of two assignment responses is compulsory while one may work on all the three if one desires so.

The present study was designed to assess the usefulness of the assignments in terms of their delivery, evaluation, number, language, tutors comments and scope for improvement. The interview for this purpose was conducted with 22 randomly selected learners of Bachelors Degree Programme (BDP) of IGNOU out of 173 learners admitted in 1989 and associated with its Ranchi Study Centre. The data thus collected were analysed, interpreted and the findings have been presented in this paper.

The learners found the assignments based on the print materials quite useful. Majority of them was of the view that assignment should form a part of the curriculum. They described the number of assignments per paper was appropriate.

However, most of the learners of non 10+2 stream found the language of the assignment somewhat difficult. Neither the assignments nor the evaluated assignment - responses were always sent to them on time. So far the tutor comments are concerned, they were more or less satisfactory but there was room for improvement. Most of the learners were satisfied with their grades.

The study leads to the conclusion that probably simplification of the language used in the assignment to an acceptable extent may help the learners. Regular despatch of assignment and

the evaluated assignment - responses, should be ensured. For this purpose, perhaps a short training may be given to the official staff engaged in this job. The problems associated with the tutor comments and grading may be solved to a great extent the distance education system and are encouraged to take pains to write teaching-type comments. Increasing the number of short answer-questions and objectives type questions may also be helpful in improving the assignments.

The New Learning Environment : A Global Perspective

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The objective of the present paper is to discuss the new learning environment in global perspective. Open learning and distance education has to come as effective mode of learning and more and more popularised today.

The paper makes an attempt to analyse open learning system as the new learning environment through effective self directed strategy, multi-media instructional material, Open learning centres and other model of learning.

Distance Education in India : Potentialities in the Next Millennium

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With a new millennium on the horizon, a dawn of new expectations in all human endeavours has begun. In the field of education in India, disillusionment with a colonially inherited system has lead to necessity for a revolutionized system that will help fulfil national aspirations. In this context, distance education is gaining importance as a tool for overcoming the inadequacies of the conventional system of education not only in India but the world over. In fact, it is fast emerging as a discipline in its own right. Unfortunately, however, it remains a little understood branch of education and is often looked down upon as a second grade system.

The present paper attempts to justify the necessity and importance of distance education in the coming years for the benefit of masses. At the onset, the basic characteristics of an educational system for the future have been outlined. In essence, these are :

Relevance
Excellence
Availability
Viability

In the context of these basic but challenging demands, the paper examines the potentialities of distance education in building a new educational paradigm. On the basis of case studies and available data, the following strengths of distance education have been discussed :

- i) It is learner centred being relevant to the needs of the individual student.
- ii) It can ensure quality education of international comparability.
- iii) It promotes uniformity of standards all over the country.
- iv) It helps develop skills of independent study and resource fullness.
- v) It brings education to the doorstep of millions, thereby, effectively tackling the problem of numbers.
- vi) Use of information technology can make it pedagogically more effective than conventional teaching.
- vii) It is economically more viable than formal education given the present economic conditions.
- viii) It helps in the democratization and "de-elitization" of the education movement.
- ix) Through it, courses can be conducted for which there is little demand at one place.
- x) It easily reaches the remote and sparsely inhabited pockets of the country.
- xi) Learner has greater choice of selecting courses to meet his own requirements.

However, if distance education is to play its role in transforming the educational system, it must get rid of some present bottlenecks - administrative, financial and academic. The paper touches upon these constraints, thereby offering some implementational suggestions.

Open Learners at School Level Problems and Prospects

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Through out the world the concept of Open and Distance education is catching up fast. Because of its distinct features over the conventional system of education, a large number of disadvantaged students are being attracted towards it. The inherent flexibilities basically in terms of time, place, and pace make it a system to suit the convenience of the learners specially those who belong to educationally and socio-economically backward section of the society.

However, practically it has been observed that inspite of so many flexibilities and openness, many of the open learners face a number of academic as well as administrative problems that create demotivation and discouragement. Therefore, it results in to sub standard performance and some times dropping out as well. Keeping this view in mind, a research has been conducted to identify the basic problems of the learners in the open learning system at school level. The target group included the secondary and senior secondary level students from Delhi region of the National Open School in India. The present paper deals with the academic problems only whereas there are also several support service related problems. On the basis of the findings a few suggestions have also been incorporated in the paper.

A Week in the Life of an Open Learner

David Murphy

Open University of Hong Kong

Jessie C.K. Yum

Kong Kong Polytechnic University

This presentation will outline the methods and findings of a recent research effort designed to investigate the ways in which part-time adult open learners balance the demands of their courses with the pressures of work and family life. In particular, the research aimed to reveal ways in which open learners organise their study and integrate course requirements with other competing and continuing commitments.

The principal instrument used in the research was a diary, which students were required to maintain for a period of one week. The diary also contained a questionnaire designed to ascertain the student's perception of their study workload, along with Biggs' Study Process Questionnaire which measures students' approaches to learning.

In addition to the diary, a small number of students took part in semi-structured interviews. The student sample groups were drawn from business and nursing programmes.

The analysis of the data involved both quantitative and qualitative methodologies, the aim being to triangulate the findings and thus provide convincing findings. In particular, NUDIST software has been applied to analyse the qualitative data provided by the interview transcripts.

A further aim of the presentation is to demonstrate how the research instruments and analysis might be modified for use in other settings.

Studies of System of Distance Learning by the Use of Interactive Video via ISDN (2B+D)

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Japan

Studies of lifelong learning at a distance between University and four rural public halls were made using 128 kbs interactive compressed video via ISDN(2B+D) in Fukushima prefecture.

During the course of the present studies, tutoring sessions focused on special topics of rural life were transmitted from the lecture room of Koriyama Women's University to the classroom of rural public halls by the use of 128 kbs teleconferencing equipment (Telephovision HV-300, HITACHI) via ISDN (2B+D).

The tutoring sessions of one and a half hours each were usually composed of the former half of a lecture and the latter half of a question-and-answer. The latter used to grow livelier to interchange personnel between teacher and students, and students themselves.

Evaluations of the system and the teaching method were done by student's questionnaires of five ranks rating the educational aspects and human factors after each session.

The tutoring session at a distance via the ISDN was quite acceptable to students on condition that the sound was good quality, that the stature of teacher as big as life size was shown on TV, and that interaction was intended between teacher and students during session. The interaction played particularly important role throughout the studies. Among lectures, favourite contents for students included close to home problems, fine arts and also a sort of callisthenics exercises.

Since the compressed video via ISDN (2B+D) is cost effective, through these studies, it appears that practical use of interactive video can effectively be realized in lifelong distance learning.

The Paradox of the Paradigms : A Conceptual Foundation for Teaching the Practical Arts at a Distance

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In Australia, many rural communities are deprived of educational opportunities because of their remoteness from urban centres. Australia's response has been to encourage the provision by universities and colleges of a broad range of distance education programs. However, because of the difficulties of reproducing the studio experience in distance education, practical art subjects confront particular problems when offered in this mode.

In schools of contemporary art, there is continual debate about the impact that instruction in the conventions of art has on the central values of the artistic enterprise on the basis of cultural diversity, subjective autonomy and the ambiguities of art with its metaphoric codes of interpretation. This problem is exacerbated in distance education because instruction needs to be communicated clearly and directly - in ways which may be judged in artistic terms to be overly didactic, sterile and dogmatic. Consequently, the design and implementation of a program runs the risk of defeating the program's original intent.

As subject specialist and instructional designer respectively for the practical art subject, Making Your Mark in Drawing, offered through the Open Learning Agency, we were faced with the need to confront this challenge. In this paper, the strategies that can be used to meet the complementary goals of igniting creative vitality while providing clear direction will be examined. Ways in which these strategies can be implemented in teaching and translated into printed text will be explored.

The Virtual University of India

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Based on my research, this paper examines the different forms the virtual university could take. One of these is the association of virtual.

University with a culture at local and global levels. This suggests the idea of a Virtual University of India that at one level addresses local needs in the Indian subcontinent for the development of education at tertiary level, and at the other, the global extension of Indian culture resulting from the Indian diaspora of the twentieth century.

Open and Distance Learning - The Cornerstone of Lifelong Learning for the Information Age

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The twenty-first century is set to be the century of lifelong learning. Education is now recognised as not only the key to individual well-being in society but also as the means to produce the highly skilled workforce necessary for every nation to develop. But in today's information age educational need is changing. Every citizen needs an increasingly high level of education and also need to continue learning lifelong, in order to work productively in society undergoing continual change. Access for all to such learning is the main challenge facing us now.

In countries where full formal education is still far from universal, the challenge is serious indeed. How can we overcome the backlog of educational deprivation and build for the future at one and the same time? The importance of open and distance learning in overcoming barriers of access has been increasingly recognised by governments and international bodies alike, who have incorporated it in plans for educational development. But its potential has yet to be fully realised.

The paper will describe recent changes in the scope, methods and media of open and distance learning, discuss the impact of new information and communications technologies, and suggest that as open learning becomes integrated into national strategies for lifelong learning, practice of teaching and learning will be progressively transformed to become rooted in the concerns, experience and needs of learners. It will draw on examples from all parts of the world, including India, and ask how far open and distance learning can serve as the mechanism to enable developing countries to catch up with and even overtake the rest. It will argue that, carefully planned, a strong drive to use open and distance learning methods to support teaching and learning could immeasurably strengthen national efforts towards lifelong learning for all.

Global Education : Some Issues

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The role of education is greater today, since it has to concentrate on total literacy on the one hand and on the other hand computer literacy and technical literacy to cope with a changing world.

In developing countries like India, the role of education in national development is more valid today than was before. It has to attempt total literacy on the one hand and computer and technological education on the other hand to compete in the newly changing world setup. At present, with the globalisation and information society movement, the important questions facing us in human resource development for global interactions are : (a) what skill do we need to cope with the future and (b) what type of education are demanded. These problems can easily be handled through Distance Education, which is said to be a multi-media system.

Continuing In-Service Training for the Staff who are Working in Distance Education Systems : A Case study on In-Service Training Suggestion for OEF Staff

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In-service training is very important and necessary for the staff in distance education systems. It helps to develop institutionally and new programmes and projects.

This research is conducted on OEF staff who work as officers, authors/editors and academic advisor since beginning years of the OEF. Research include to inform this staff generally on distance education systems, it's history, DE concept, and it's different applications of all around the world. Also it includes Turkish case of OEF and it's running since beginning years.

The research realised by empirical method. It has administered 200 questionnaire of OEF staff, office personnel, authors/editors and academic advisors.

At the evaluation phase of research, findings are grouped and explained under three titles. These are office personnel, author's/editors and academic advisor's approach to continuing in-service training. At the end of the research it is found that this continuing in-service education is very important and necessary for all kind of staff of the OEF, and also for DE systems.

Distance Education and Educational TV Producing Process : The Role of Education TV Programmes as Being One of the Educational Components in Distance Education Systems and Producing Process of Educational TV Programmes In Faculty of Open Education at Anadolu University -Turkey

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This paper mainly points out to the explanation of theoretical information of using educational TV programmes in distance education systems from the fundamental elements and production point of view.

For that reason, this paper indicates the role of technological opportunities and human resources and their functions dealing with production process of educational TV and radio programmes in the Faculty of Open Education at Anadolu University, Turkey.

Additionally, this paper include conditions for producing educational TV and radio programmes, the problems that are faced during the production and comments for future goals. At the end of paper, authors will show a sample of educational video/TV program to participants.

Interactive Distance Education : A Summative View of Indian Teleconferences

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The paper deals with the need for incorporation of a Teacher-Taught interaction into the TV mediated instruction, a major component of the network of learning resources in Distance Education. It exposes to a number of plausible modes and modalities of Teacher-Taught Interaction, the Indian attempts to provide an Interactive Distance Education through satellite based teleconferencing and concludes with some implications and imperatives for further probing and planning.

Management Challenges of Distance Education in India

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The purpose of the distant mode of education is to take the facilities of education at door step of the learners who are not supposed to move to big cities where conventional educational institutions are located. Hardly 5 to 10 per cent of the youth in the relevant age group is covered by formal higher education system. The existing institutions of higher learning are over crowded. Thus the change from a closed to an open system of education is the need of the hour. In India, distance education has emerged as an alternative model to conventional mode of education during the last three decades. We have an experience of 30 years of managing the higher education in India. Some of the management problems that can be identified are lack of autonomy on the part of management non-representation of such institutions in decision making bodies of the Universities, neglect of quality, absence of innovations, move towards commercialisation etc. It should be kept in mind that the distance education system may also prove disastrous unless some steps are taken to remove the weakness of the system. The following factors should be kept in mind in this respect.

- i) Centre of distance education should not be treated as subordinate to conventional universities. It must have say in decision making relating to academic matters of the universities and it must enjoy sufficient autonomy.
- ii) The Universities should permit the students to do part of degree course of same subjects through formal full time course and part through the distant system, thus removing the barriers between these two systems.
- iii) An effective co-ordination is essential in preparation of quality course materials and their timely despatch to the enrolled students.
- iv) One of the most important requirements is the availability of good student support services which include establishment of study centre, arrangements for personal contact programmes and audio-video conferences, periodic written assignment etc.

In the present situation of limited resources, consolidation of distant education mode is a social and academic necessity. The system has to live upto aspiration of the people and it needs constant updating. It has to go with its flexibility, academic transparency and cost effectiveness.

Open Learning in Technical Education

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As a global phenomenon in the field of education, recent years have witnessed a significant change in learning environment. The process of evolutionary adaptation has never been so fast, strong and distinct as in recent years. Institutions of technical education in India are also being considerably affected by the alterations emerging due to shifting priorities and accents of nation wide policies on education. Optimisation of resource-use has now become the objective function

of every quality-concerned-client-oriented Technical Education Institute(TEI). Stronger links with industry, need-based curriculum, rationalization of contact time, revenue generation effective use of IT and optional learning conditions therefore are the major areas of concern of TEIs.

One response which meets these challenges is open and flexible approach to teaching and learning. There has been a growing acceptance of the fact that the TEIs will have to assume flexibility at all stages and levels from structure of courses through to the forms of assessment. Instituting Open Learning System (OLS) will have significant implications for TEIs. The present paper reviews the implications of instituting OLS in TEIs in India. It takes Regional Engineering colleges as reference set. In a way, it presents a 'System Audit' highlighting the major concerns and issues, resources and constraints, strategies and probable responses and benefits and costs. System preparedness for change - management has also been critically analysed.

Management of Open University

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Management of any organisation has to essentially follow the principles that are laid down in various management books and the educational institutions are no exception to them. There is a thin line of difference in managing an open university as the complicity and the complexities are slightly more in an open university or in a distance learning institution.

The basic difference, as I perceive, is in the approach and attitude of the persons involved in managing such institutions. From the top executive to the bottom rung functionary in such institutions must realise the "extra" responsibility that each one has to shoulder accordingly at the appropriate level. Admittedly it is better said than done.

What does one mean by a different approach and attitude? Why it should be different? To answer the last question first, because the management of open universities can not be a run of the mill type in view of the basic and structural difference as compared to the conventional universities. In an open university the teachers are not taking classes as commonly done in other universities. Here they are counsellor, course writer, guide and what not. The area of performance is so varying that they act equally as a manager and a teacher. Similarly the role of non teachers are also quite different and the scope of their functions are quite wide than in any conventional college and university.

Now the answer of the first question or issue i.e, approach and attitude. The success and failure of the management of an open university depends on this different attitude and approach which include more flexibility, more importance to each individual, motivation, and maintaining and good interpersonal relationship.

Although these factors are required everywhere, the distance education institutions must have these concerns as a part of their managerial process. The more such concerns are practised (and

less preached) in an institutions, the more is the rate of success of the institution, especially an open university or distance learning institution.

Learners Perspective of Distance Education

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This paper seeks to address four related issues in education and training through distance learning system. The first of these is the profile of distance learners. Who are the clientele making use of the system? And to what extent it fulfils the objectives of distance education programme are some of the highlights of first issue. The second issue deals with a wide range of programmes available in distance learning system and the programmes which are most popular among the respondents has been shown. The third consideration is about the facilities available in distance learning system through its wide network of study centers and the extent of its use. Whilst, the fourth consideration is regarding the problems as encountered by the students. This section outlines the problems in relation to the use of facilities obtained in study centers and other areas of difficulties too. Section fifth draws together the arguments and put forth some issues for thought. We have also made a brief statement about the concept of distance education in the beginning.

Computer Mediated Communication in Distance Education

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It is believed that Computer Mediated Communication will ultimately emerge as a new educational paradigm, it will also change the nature of 'traditional' multimedia distance education. On-line education has unique attributes, even though it shares some of the features of place-based education (notably groups interactivity) and distance education (notably the freedom from time and place constraints). Computer Mediated Communication has the potential to provide a means for the weaving together of ideas and information from many people's minds, regardless of when and from where they contribute.

Teacher Education at a Distance : Towards A New Model

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Education of in-service teachers has always been an important concern for the various commissions and committees set up from time to time to provide recommendations for educational development in our country. It is because the teaching today faced many challenges, emanating from expanding horizons of knowledge as well as other forces impinging upon the consciousness of the pupils. Hence, there is a strong need for effective and recurrent programmes of in-service teacher education for teachers starting from primary to tertiary levels. The job of

in-service education of teachers has been mainly the concern of institutions like NCERT, SCERTs, DIETs and teachers training colleges. All these institutions carry out in-service education programmes through face to face mode. However, all in-service education programmes cannot be organised in face-to-face mode modality especially in view of the numbers involved. According to available statistics as on 1994, there are about 4.0 million teachers catering to the educational needs of 171.4 million school students at primary, middle, secondary and higher secondary levels. Out of this number, more than 10 per cent of the teachers at these levels still remains to be trained. Considering the number of teachers (both trained and untrained) to be provided in-service teacher education, the training facilities in face-to-face mode is very negligible. hence, there is a need of searching for alternative mode of imparting in-service education to teachers. Distance-education can be effectively used to impart education to inservice teachers at all levels.

The paper under consideration intends to describe the Bachelor of Education (B.Ed.) programme which will be provided to the untrained in-service teachers of secondary schools by Indira Gandhi National Open University (IGNOU) through distance mode. The B.Ed. programme by IGNOU will be a new model so far as teacher education at a distance is concerned. However, the paper will also describe the teacher education models followed by correspondence courses institutes (CCIs). The paper will discuss the structure of the IGNOU B.Ed. programme, its instructional system, course development process, delivery mechanism and the evaluation system. The paper will also focus on the skill and attitude development in the teachers which is a major concern of any kind of teacher education programmes.

Developing Thinking : A Critical Objective of Education in The Next Millennium

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The paper highlights the need for education to include developing speed and ease in thinking for a world where the volume of information is growing exponentially and its content keeps getting more and more complex.

This is contrasted with traditional educational systems (syllabus-based) which focus on covering a given content, usually leading to rote memorising.

The paper explains the wide variety of thinking activities that need development from the broad division of right-brain (parallel thinking, intuitive, artistic) and left-brain (serial, logical, mathematical) to the many specifically different types of activities that form part of intellectual work: verbal, logical, mathematical, intuitive, musical, poetic, visualising, creative (combination of the above), categorising, judgement it, problem-solving (combination of the above), etc.

The paper presents some examples of the kinds of mental exercises that could be used to improve the performance of the brain in each of these areas.

The paper also presents the importance of good breathing for high quality thinking.

The paper finally presents a case study of how this has been implemented in St Xavier's Technical Institute which is autonomous, and has introduced a compulsory 2 credit course on "Thinking Skills".

Transfer of Learning Between Mathematics and Computer Studies at the Secondary School Level

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A study was undertaken to examine if there is any transfer of learning between study of Mathematics and Computer Studies. The sample consisted of 100 students of class from a secondary school of Delhi.

A pre-post design in a matched group framework was adopted for this study. Two groups were formed (the experimental group which had undergone computer studies course for 2 years, the control group who had not undergone a course in computer studies). At the pre-test stage, they were equated on group mean and standard deviation in marks in English and Mathematics in class 8. At the post-test stage, their performance in mathematics and English was compared.

The variables selected were performance in computer studies, mathematics, verbal reasoning and abstract reasoning. Verbal and abstract reasoning were measured through the Indian Adaptation of Differential Aptitude Tests. Performance in Mathematics, English and Computer Studies was measured with the help of the school records.

Data were subjected to t-test analysis, correlation analysis and multiple regression analysis which provided evidence for transfer of verbal reasoning ability between Mathematics and Computer Studies.

Participatory Learning and Rural Poor

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Since first five year plan, large amount of money has been spent by subsequent governments to give free and compulsory education to children and rural poor. It is the mission of Government educational and other institutions, above all, educated people, to promote literacy but all in vain. Enhancement of knowledge is education but knowledge of rural poor in India is never enhanced. In the twenty first century Indian poor mostly the marginal farmers bound with traditional practices are reluctant to accept better and appropriate technology. Rural poor hardly get an opportunity to field exposures, orientations and training. Bonded and landless labourers particularly tribal people in remote rural areas who constitute a large percentage of poor have no access over formal and non-formal education. The education system has failed to create an inner urge within rural poor to learn reading, writing and counting.

Without being a literate, rural people are rich in knowledge - about their locality, traditions and culture. But educated people's belief that "rural people are illiterate so they have a poor knowledge base" is not true. National Literacy Mission and Zilla Sakharata Samitites with their time bound and unholistic approach have failed to help neo-literates to be literates in true sense. Indian rural poor having unique characteristics are unable to come out of the "vicious circle of poverty" which discourages to devote their valuable time to learn reading, writing and counting.

Rural people love community life and learn better in group. Informal way of learning always score an edge over formal and non-formal system. Informal learning system is more participatory and enjoyable. Here they sit in a group, discuss different problems in their language from their angle, identify their potentiality and prospects and take decisions. By doing this they became "local planners" rather than mere literates.

The learning centers in a participatory learning system for people at grassroot level are community centers, chaupadhis, manda/kotha gharas, dormitories of young tribals and gramsabhas.

Flip Chart - A Simple and Effective Instructional Media

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Flip chart is one of the commonly used non-projected instructional media in training situations. It is specially useful for instruction involving sequential steps in a process. It can also assist the lecturer in maintaining an organized presentation. It is inexpensive, easy to use, and can be an attractive addition to the training session. The paper also elaborate the procedure of designing flip charts.

Knowledge Networks : The Learning System in the Next Millennium

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Computers and Communication technologies have had a significant impact upon the ways in which we learn, teach, communicate and gain access to information. Computer based technologies on education and training is to increase considerably in future. Developments in educational technology call for a more holistic and integrated models within educational settings. Electronic lectures, collaborative learning and teaching, teleteaching, student self assessment through automated interactive online testing, digital resource libraries and access to Internet and the World Wide Web would be the future educational modules. World over higher education, is now undergoing a paradigm shift from an instruction - centred model to a learner - centred integrated network model based on access to learning resources and student initiative. Distance learning/ education has been a major beneficiary of developments in information technology. Introduction of interactive video-communication, teleconferencing and discussions on Internet have facilitated distance learning for groups at off-campus locations and have given rise to the distributed class-room model. CDROMs, multimedia, virtual class-room, video desktops, etc., promise interesting possibilities in formal and non-formal educational streams.

Internet and infohighways are going to have a major impact on the way education is to be imparted. Internet is likely to succeed as a vehicle for real education which can help for creation of new course material that is superior to traditional case studies and for the process of dialogue of conversational learning in electronic form. Resources available on Internet not only can replace classroom teaching, it can also improve perceptions and comprehension of knowledge through computer applications. Interaction through e-mail, voicemail, video conferencing, bulletin boards, electronic conference on Internet have been the order of the day. Information access and sharing of inventions and innovations are discussed in the context of electronic era.

Electronic course delivery has much to offer in terms of efficiency and effectiveness of knowledge transfer in both conventional and post compulsory education. Significant advances in knowledge transfer, knowledge networks and global sharing of electronic resources through infohighways are observed. Electronic lectures mechanism to facilitate lectures on demand, teleteaching,

teletutoring and collaborative learning at distance and support facilities of electronic libraries are highlighted.

Knowledge networks, knowledge sharing, institutional commitment, and need for super highway in India to meet the future challenges of higher education are examined. Privatisation of communication services and role of commercial providers of instructional materials are perceived. Need to establish on priority the Educational Technology and Instructional Material Development Laboratories and campus networking to create real virtual organizations in the institution of higher learning is stressed.

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Concurrent Sessions

Chart Space Allocation

Rooms	13 November, 1997				14 November, 1997
	Session I 10.30 - 12.00	Session II 12.00 - 13.15	Session III 14.00-15.30	Session IV 16.00 - 18.00	Network Session V* 1400-1530
Napolean I	Education for All Sushmita Mitra*				Education for all including Education of the Prioritized Groups
Napolean II	Education of the Prioritized Groups Rajesh Kumar*				Open and Distance Education
Napolean III	Teacher Education Md. Mia*		Management and Computer Education Ranjan Kumar*		Higher Education
Napolean IV	Technical Education Mridula Virmani*			General Education Kailash Khanna*	Professional Education
Raisina I	Educational Systems Development M. Kandan*			Cognitive Processes Sanjay Das*	Learning Systems
Raisina II	Open and Distance Education S. K. Panda*				
Windsor	Impact of Education Oum Prakash*		Higher Education C. R. K. Murthy*		International Involvement and Collaboration in Education

* Sectional Coordinators

Authorwise Schedule of Presentation of Papers

Theme : Education for all

Venue: Hall Napoleon - I (Le Meridien)

November 13, 1997			
Session I : 10.30-12.00	Sessions II 12.00 -13.15	Session III 14.00- 15.30	Session IV 16.00-18.00
Madhu S Prakash	Veena Thakare	Riki Malan Trudi Vanwyk	Anita Devraj
Saraswati Agarwal	Nirmala Jyothi T Rajyalakshmi Y. Sudhakar Reddy	N. Sabharwal S. Nagpal	E. S. Naidu
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			H. K. Senapathy
			R. B. Manekar
			N. Pradhan
			Sita Vanka

Theme : Education of Prioritised Groups Venue: Napoleon -II (Le Meridien)

November 13, 1997			
Session I : 10.30-12.00	Sessions II 12.00 -13.15	Session III 14.00- 15.30	Session IV 16.00-18.00
N. Nagarajan	Celsa Pinto	T. N. Giri	B. K. Panda
S. Mukhopadhyay	C. Muthuraja	M. V. Sreedhar	K. Nirmala
Praveen Budhdev	Urmi Sampat	J. Jalali	Satinder Dhillon
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			Shamim Akhtar

Theme : General Education.

Venue: Raisina I (Le Meridien)

November 13, 1997			
Session I : 11.30-13.00	Sessions II 14.00 -15.30	Session III 16.00- 17.30	Session IV 16.00-18.00
			Shashi Agarwal
			S. K. Saxena
			Dev Mallya Datta
			A. Abdul Kareem B. S. Kannaiyan
			Rana Aziz Ali Y. B. Lal
			M. Manimekalai R. Karpaga Kumaravel
			Asha Sawhney
			A. G. Matani

Theme : Technical Education

Venue: Napolean IV (Le Meridien)

November 13, 1997			
Session I : 10.30 - 12.00	Sessions II 12.00 - 13.15	Session III 14.00 - 15.30	Session IV
P. Radhakrishnan	Ajit R. Thete S. B. Mahajan R. A. Kulkarni	G. Vijayalakshmi T. Rajalakshmi	M. A. Qureshi Vineeta Mohindra
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			P. S. Avdani
			Y. V. S. R. Moorthy

Theme : Teacher Education

Venue: Napolean III (Le Meridien)

November 13, 1997			
Session I : 10.30 - 12.00	Sessions II 12.00 - 13.15	Session III	Session IV
K. T. Bhatia	Asha Sharma		
M. K. Sarma	Shakuntala Nagpal		
Saroj Pandey	M. L. Sisodia		
M. Butala	Abhay Kothari Santosh Rangnekar Upinder Dhar		
K. Khanikar	Kalpalata Pandey		
	A. K. Palaniappan		

Theme : Higher Education

Venue: Windsor (Le Meridien)

November 13, 1997			
Session I :	Sessions II	Session III 14.00 - 15.30	Session IV 16.00 -18.00
		Vishesh Verma	Rekha Dave
		Ashrafa Jelani	P. S. Satsangi
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		Ashish Das	M. Sahasrabuddhe Anjali
			S. S. Gill T. K. Gill
			Sujatha M. Sahasrabuddh

Theme : Management & Computer Education

Venue: Napolean III(Le Meridien)

November 13, 1997			
Session I :	Sessions II	Session III 16.00- 17.30	Session IV 11.30-13.00
		Vijaya Manerikar	Abhay Kothari Upinder Dhar
		Ajay Prashar Upinder Dhar	Padmakar Sapre
		Vasant V. Bang	Lajwanti D. K. Chaturvedi M. Satsangee S. P. Satsangee
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		K. Ramakrishanan	Sudheer Dhume
			Raj K. Agarwal
			S. Chandra
			Nalini Tripathi Sujata Mangaraj

Theme : Open & Distance Education

Venue: Raisina II(Le Meridien)

November 13, 1997			
Session I : 10.30 - 12.00	Sessions II 12.00 - 13.15	Session III 14.00 - 15.30	Session IV 16.00 - 18.00
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Theme : Cognitive Process & Learning System Venue: Raisina(Le Meridien)

November 13, 1997			
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			Francis de Melo
			Renu Sahani
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			A. Brijendra Singh
			Sitakanta Sethi

Theme : Impact of Education

Venue: Windsor(Le Meridien)

November 13, 1997			
Session I : 10.30 - 12.00	Sessions II 12.00 - 13.15	Session III	Session IV
N.V.R. Kapali	Anand Blushan Malvinder Ahuja		
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Theme : System Development

Venue: Raisina(Le Meridien)

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Session I : 10.30 - 12.00	Sessions II 12.00 - 13.15	Session III	Session IV
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